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Please search attached claims and Inventors:

(1) Michael Catt
(2) Peter Lenko
(3) Michael T. Pearson

drop 13

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- ___ APS
- ___ Geninfo
- ___ SDC
- ___ DARC/Questel
- ___ Other

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     FILE 'HCAPLUS' ENTERED AT 10:03:28 ON 19 MAR 1998
               ACT PORT935/A
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L1   (         12)SEA FILE=HCAPLUS ABB=ON  ("CATT M"/AU OR "CATT M J"/AU OR
L2   (         20)SEA FILE=HCAPLUS ABB=ON  "PEARSON M"/AU
L3   (          9)SEA FILE=HCAPLUS ABB=ON  "PEARSON MICHAEL"/AU
L4             41 SEA FILE=HCAPLUS ABB=ON  L1 OR L2 OR L3
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L5           2402 S ANALYTE#
L6           6117 S KIT#
L7              4 S L4 AND (L5 OR L6)
L8         120400 S FLUID#
L9              5 S L4 AND L8
L10             6 S L9 OR L7
L11          7551 S KIT# OR TEST (L) STRIP#
L12         60153 S ASSAY#
L13         42085 S BODY FLUID# OR URINE (L) ANALYSIS
L14          1116 S L11 AND L13
L15          1262 S ANALYTE#  (L) (ANALYSIS OR CONC? OR QUALITAT? OR QUANTI
L16            69 S L11 AND L15
L17            33 S L13 AND L16
L18          3464 S L12 AND L13
L19            35 S L18 AND L15
L20         42085 S L19 OR L17 OR L13
L21          1145 S L19 OR L17 OR L14
L22          5936 S MONITOR? (L) (DEVICE# OR METHOD# )
L23          4656 S APPARATUS (L) TEST?
L24            10 S L21 AND L22
L25            70 S L23 AND L21
L26          3010 S (TEST STRIP# OR CARRIER STRIP# OR ASSAY DEVICE# OR LOCK
L27            66 S L25 AND L26
L28          3057 S APPARATUS (L) TESTING
L29             5 S L25 AND L28
L30           602 S L26 AND L14
L31             0 S (MONITOR  (4A) READER)
L32             6 S (MONITOR  (4A) READER)/AB
L33           180 S (MONITOR? OR MONITOR?/AB) AND (READER? OR READER?/AB)
L34             0 S L33 AND L14
L35             0 S L15 AND 34
L36             0 S L15 AND L34
L37           182 S L15 AND L13
L38            24 S L37 AND (L26)
L39             0 S L37 AND L33
L40            15 S L24 OR L29
L41            24 S L38 NOT L40
L42             2 S L10 NOT (L40 OR L41)     another inventor search

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L40  ANSWER 1 OF 15  HCAPLUS  COPYRIGHT 1998 ACS
AN   1998:76381  HCAPLUS
DN   128:138324
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TI Toilet seat **apparatus** for sampling and **testing** urine
IN Kawaguri, Masaaki; Tanaka, Eiichi; Matsunaka, Masahiko; Nakanishi, Keiko; Shinoda, Hideho
PA Matsushita Electric Industrial Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
PI JP 10031015 A2 980203 Heisei
AI JP 96-184571 960715
DT Patent
LA Japanese
AB The app. contains (1) a toilet seat, (2) a receiving cup for excrements, e.g. urine, which is attached to the seat through the fitting part, and (3) a detector for the components of the excrements, e.g. a test strip for color reaction, and the cup and the fitting part comprise water-sol. materials, preferably having multilayer structure, in which the inner side is coated with a slightly-sol. material and the outer side comprises a well sol. material. The app. may addnl. has a water nozzle to wet and detach the swollen cup from the seat and drop into a toilet bowl.
IC ICM G01N033-48
ICS A47K013-24; E03D009-00; G01N033-49; G01N033-50
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 14
IT Toilets
(seat; toilet seat **app.** having water-sol. urine-sampling cup, **test strip**, and optional water nozzle for wetting and dropping cup)
IT Sampling **apparatus**
Urine analysis
(toilet seat **app.** having water-sol. **urine** -sampling cup, **test strip**, and optional water nozzle for wetting and dropping cup)
IT Water-soluble polymers
RL: ARU (Analytical role, unclassified); DEV (Device component use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(toilet seat **app.** having water-sol. urine-sampling cup, **test strip**, and optional water nozzle for wetting and dropping cup)

L40 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:623004 HCAPLUS
DN 127:289323
TI Device for the collection, testing and shipment of **body fluid** samples
IN Cipkowski, Stan
PA American Bio Medica Corporation, USA; Cipkowski, Stan
SO PCT Int. Appl., 28 pp.
CODEN: PIXXD2
PI WO 9733519 A1 970918
DS W: AT, AU, BR, CA, CH, CN, CZ, DE, GB, IL, JP, MX, NO, NZ, PL, RU, SG, SI, US, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
AI WO 97-US3347 970311
PRAI US 96-613487 960311
DT Patent
LA English

AB A drug abuse test kit has a transparent cup-like container for retaining a fluid sample to be tested and the open top end of the container is closed by a closure cap seated upon the open end. There is a slit in the closure cap to receive a multiple drug test card having a plurality of immunoassay test strips thereon with visual endpoints to indicate presence or absence of a particular drug. The container is provided with a second cover which is solid and unslit to close and seal the container when a sample therein is to be transported.
IC ICM A61B010-00
ICS B01L003-00; G01N033-543
CC 4-2 (Toxicology)
ST device collection testing shipment **body fluid**
IT Caps
(Closure; device for collection, testing and shipment of **body fluid** samples)
IT Containers
(Cup-like; device for collection, testing and shipment of **body fluid** samples)
IT **Body fluid**
Collecting **apparatus**
Drug abuse
Forensic chemistry
Pharmaceutical analysis
(device for collection, **testing** and shipment of **body fluid** samples)
IT Immunoassay
(**test strip**; device for collection, testing and shipment of **body fluid** samples)

L40 ANSWER 3 OF 15 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:449981 HCAPLUS
DN 127:62836
TI **Test apparatus** can avoid leakage of reagents during **testing** liquid samples
IN Yamaguchi, Takehiro; Yamamoto, Kenji
PA Kyoto Daiichi Kagaku K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
PI JP 09138233 A2 970527 Heisei
AI JP 95-297136 951115
DT Patent
LA Japanese
AB A test app. such as a test strip used for blood or urine anal. is improved to avoid overflow of the liq. sample and thus the leakage of reagents. The app. is prepd. by mounting the reagent layer between a supporting layer and a cover so that the reagent layer, sided with a liq. flow-blocking device, is placed in a capillary chamber. When testing, there is no need to wipe off the extra liq. Prepn. and use of a blood anal. test strip for glucose detn. were shown.
IC ICM G01N033-52
ICS G01N031-22
CC 9-1 (Biochemical Methods)
ST **test strip app** liq flow restriction
IT Blood analysis
Urine analysis
(**test app.** can avoid leakage of reagents during **testing** liq. samples)

IT **Apparatus**
(**test strip; test app.**
can avoid leakage of reagents during **testing** liq. samples)

L40 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:6033 HCAPLUS
DN 126:28796
TI Improved diagnostic detection device for **urine analysis** with application to pregnancy testing
IN Nazareth, Albert; Cheng, Yea-Shun; Boyle, Mary Beth
PA Carter Wallace, Inc., USA
SO PCT Int. Appl., 32 pp.
CODEN: PIXXD2
PI WO 9634688 A1 961107
DS W: AU, CA, JP, MX
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
AI WO 96-US6086 960501
PRAI US 95-432890 950502
DT Patent
LA English
AB The single-step test device for detecting the presence of a pre-selected analyte in a urine stream comprises a hollow outer casing and an assay material placed within the casing. The outer casing defines a urine inlet port, a viewing window, and .gtoreq.1 drainage vent spaced about the urine inlet port. The assay material is a sorptive material defining a urine sample application region adjacent to, and in fluid communication with the urine inlet port; a capture region adjacent to the viewing window; and a fluid flow path for transporting liq. sample between the urine sample application region and the analyte capture region. The drainage vent permits excess urine entering the casing from the urine stream to exit the casing to minimize hydraulic pressure induced flooding of the assay material in the casing and to reduce the frequency of false test results. As a pregnancy test, the device comprised a polystyrene casing contg. bonded hydrophilic polyester as urine absorbent, a paper release media and nitrocellulose membrane capture media laminated onto polyethylene terephthalate, with test reagents on the media comprising anti-hCG monoclonal antibody 2G9 conjugated with colloidal Au particles, anti-hCG monoclonal antibody CCF01 conjugated with biotin, and streptavidin. Results recorded by 50 women after 15.4 and 15 s of urination indicated that the drainage vents resulted in no invalid results due to flooded assay material.
IC ICM B01L003-00
ICS G01N033-543
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 13, 47
ST **urine testing app** onestep nonflooding; immunoassay **test kit urine** onestep nonflooding; pregnancy **test kit** onestep **urine analysis**
IT Monoclonal antibodies
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(2G9 and CCF01; one-step sorption **app.** for analyte capture in urine stream suitable for pregnancy **testing**)
IT Diagnosis
Immunoassay

Pregnancy
Urine analysis
(one-step sorption **app.** for **analyte** capture in **urine** stream suitable for pregnancy **testing**)

IT Polyesters, uses
RL: DEV (Device component use); USES (Uses)
(one-step sorption **app.** for analyte capture in urine stream suitable for pregnancy **testing**)

IT 9002-61-3, Chorionic Gonadotropic hormone
RL: ANT (Analyte); ANST (Analytical study)
(human; one-step sorption **app.** for analyte capture in urine stream suitable for pregnancy **testing**)

IT 9002-67-9, Luteinizing hormone
RL: ANT (Analyte); ANST (Analytical study)
(one-step sorption **app.** for analyte capture in urine stream suitable for pregnancy **testing**)

IT 58-85-5D, Biotin, conjugates with immunol. reactive substance
7440-57-5D, Gold, conjugates with immunol. reactive substance
9013-20-1, Streptavidin
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(one-step sorption **app.** for analyte capture in urine stream suitable for pregnancy **testing**)

IT 9003-53-6, Polystyrene 9004-70-0, Nitrocellulose 25038-59-9, Polyethylene terephthalate, uses
RL: DEV (Device component use); USES (Uses)
(one-step sorption **app.** for analyte capture in urine stream suitable for pregnancy **testing**)

L40 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:610281 HCAPLUS
DN 125:238647
TI **Method** for maintaining a continuously saturated level of ascorbic acid in a patient's body, and **method** and **kit** for urine **monitoring**
IN Ordman, Alfred B.
PA Weiss; Harry M., USA
SO U.S., 14 pp.
CODEN: USXXAM
PI US 5558870 A 960924
AI US 94-317311 941003
DT Patent
LA English
AB A method is disclosed for administration of vitamin C to ensure that a continuously satd. level is produced in the body of a taker. A dose of about 500 mg taken approx. every 12 h produces a continuously-detectable level of vitamin C in the urine of an av. healthy person, which corresponds to a sufficiently high pool of ascorbic acid in the body to provide antioxidant protection. The min. dosage and regimen found to be effective are resp. substantially higher than the U.S. recommended daily allowance and more frequent than administration rates previously used in clin. trials. Also claimed are kits that permit individuals to monitor for elevated urinary excretion of useful substances which are water sol., excreted in urine, and nontoxic at physiol. beneficial levels, such that optimal dosages and regimens can be detd.
IC ICM A61K009-20
NCL 424400000

CC 1-2 (Pharmacology)
Section cross-reference(s): 18, 63
IT **Urine analysis**
(**method** for maintaining a continuously satd. level of ascorbic acid in a patient's body, and **method** and **kit** for **urine monitoring**)
IT 50-81-7, Ascorbic acid, biological studies
RL: BOC (Biological occurrence); BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PROC (Process); USES (Uses)
(**method** for maintaining a continuously satd. level of ascorbic acid in a patient's body, and **method** and **kit** for urine **monitoring**)

L40 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:319084 HCAPLUS
DN 124:337361
TI **Method** and **kit** for **monitoring** mammalian reproductive cycles
IN Klemm, William Robert; Rivard, Germain Francois
PA Texas A and M University System, USA
SO PCT Int. Appl., 49 pp.
CODEN: PIXXD2
PI WO 9606352 A1 960229
DS W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
AI WO 95-US10483 950817
PRAI US 94-293666 940822
DT Patent
LA English
AB A method for monitoring mammalian reproductive cycles by monitoring variations in the quantity of one or more low mol. wt. volatile compds. having a mol. wt. of less than 50 g per mol present in a body constituent sample is disclosed. Samples of a body constituent selected from the group consisting essentially of humoral fluid, breath and body cavity air are collected from a female mammal a multiple no. of times during the reproductive cycle. The quantity of a low mol. wt. volatile compd. in each sample is measured. In the preferred embodiment, the low mol. wt. volatile compd., acetaldehyde, will be measured and monitored. Variations in the quantity of the low mol. wt. volatile compd. appearing in each sample is monitored to det. the phase of the mammal's reproductive cycle and to predict the occurrence of ovulation.
IC ICM G01N033-53
ICS G01N030-02; G01N027-00; G01N021-75
CC 9-16 (Biochemical Methods)
Section cross-reference(s): 13
ST **kit** monitoring mammal reproductive cycle
IT Air, respiratory
Body fluid
Body, anatomical
Mammal
Ovulation
Volatile substances
(**method** and **kit** for **monitoring**

mammalian reproductive cycles)
IT Reproduction
(cycle, Mammalian; **method** and **kit** for **monitoring** mammalian reproductive cycles)
IT 75-07-0, Acetaldehyde, analysis
RL: ANT (Analyte); ANST (Analytical study)
(**method** and **kit** for **monitoring** mammalian reproductive cycles)

L40 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:380437 HCAPLUS
DN 122:123958
TI Ovulation **methods**, **devices** and test **kits** for **monitoring**
IN Catt, Michael; Mundill, Paul Henry Charles; Zhang, Zhi Gang
PA Unipath Ltd., UK
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2
PI WO 9501128 A1 950112
DS W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
AI WO 94-EP2068 940624
PRAI EP 93-305220 930702
DT Patent
LA English
AB A method of monitoring the status of a current ovulation cycle of an individual female mammalian (generally human) subject, involving repeated testing of the body fluid (e.g., urine) concn. of at least one analyte, preferably estrone-3-glucuronide (E3G) of significance in relation to the status of the ovulation cycle, during at least the pre-ovulation phase of the current ovulation cycle of the individual subject, wherein testing for said analyte concn. during the current ovulation cycle conducted at least once during the interval spanning days 1 to 7 inclusive following the onset of menses, to establish a ref. concn. value for analyte in the current cycle, and then testing is conducted repeatedly during a plurality of days, preferably commencing at least 5 numerical days in advance of the mean numerical day on which actual ovulation has occurred over one or more previous ovulation cycles in the same individual subject, analyte concn. values obtained during said repeated testing being compared with the ref. concn. value to det. whether a concn. change indicative of imminent ovulation is occurring or has occurred since the previous test. The method can be based solely on E3G measurements.
IC ICM A61B010-00
ICA G01N033-76; G01N033-74
CC 2-1 (Mammalian Hormones)
Section cross-reference(s): 13
IT Contraceptives
Mammal
Ovarian cycle
Ovulation
Urine analysis
(method and app. for ovulation prediction by estradiol metabolite detn. in **urine**)

L40 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 1998 ACS
AN 1994:318845 HCAPLUS
DN 120:318845
TI **Method** to **monitor** drug therapy and assess metastasis and immunoassay **kit**
IN Robins, Simon Peter
PA Rowett Research Institute, UK
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
PI WO 9406015 A1 940317
DS W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NL, SE, SN, TD, TG
AI WO 92-GB1581 920828
DT Patent
LA English
AB The invention provides a method for detecting the presence of metastasis in subjects who are afflicted with malignancies of non-connective tissues and for monitoring the efficacy of drug protocols. The method is directed to measuring the level of native free crosslinks (e.g. deoxypyridinoline and/or pyridinoline crosslinks) derived from collagen degrdn. in biol. fluids. Biotinylated ovalbumin was prepd. and immobilized in wells of a microplate. Pyridinoline-streptavidin conjugate was also prepd. and then immobilized via streptavidin-mediated binding to biotin. Urine sample or stds. were added to each well followed by the addn. of rabbit antipyridinoline serum soln. The plates were incubated overnight, washed, and reacted with goat anti-rabbit IgG alk. phosphatase conjugate; bound enzyme was detd. optically. Native free crosslinks of pyridinoline and deoxypyridinoline were detd. in urine samples of patients with Paget's disease, hyperparathyroidism, osteoporosis, rheumatoid arthritis, and osteoarthritis by a chromatog. method with fluorescence detn. There were dramatically elevated levels of the free crosslinks in patients known to be suffering from diseases characterized by excessive breakdown of connective tissue.
IC ICM G01N033-574
ICS G01N033-68
CC 9-10 (Biochemical Methods)
Section cross-reference(s): 1, 14
ST metastasis detection collagen degrdn pyridinoline urine; immunoassay pyridinoline collagen degrdn **body fluid**; connective tissue breakdown pyridinoline urine detn
IT Blood analysis
Body fluid
Urine analysis
(native free hydroxypyridinium crosslinks from collagen degrdn. detn. in, for screening for metastasis assocd. with malignancy)

L40 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 1998 ACS
AN 1994:262307 HCAPLUS
DN 120:262307
TI Ovulation **monitoring method** and **kit**
IN Catt, Michael; Coley, John; Davis, Paul James
PA Unipath Ltd., UK; Unilever PLC; Unilever N. V.
SO PCT Int. Appl., 38 pp.
CODEN: PIXXD2
PI WO 9404924 A1 940303

DS W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, VN
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
AI WO 93-EP2146 930810
PRAI GB 92-17866 920821
DT Patent
LA English
AB A method of monitoring the status of a current ovulation cycle of a human female involves repeated testing of the body fluid concn. of .gtoreq.1 analyte of significance in relation to the status of the ovulation cycle, e.g. urinary estrone 3-glucuronide or estradiol, during at least the preovulation phase of the current ovulation cycle. Testing, e.g. by EIA, is preferably commenced .gtoreq.5 days following the onset of menses but .gtoreq.2 days in advance of the earliest day on which ovulation occurred in .gtoreq.1 previous ovulation cycle in the same individual. A kit for the assay includes an electronic device which measures and stores optical signal data from the assay and compares them with data from previous cycles.
IC ICM G01N033-74
ICS G01N033-76; A61B010-00
CC 2-1 (Mammalian Hormones)
IT **Body fluid**
Urine analysis
(estrogen detn. in, of human in ovulation **monitoring**, **method** and **kit** for)
IT Ovulation
(**monitoring** of, in human, estrogen detn. in urine in, **method** and **kit** for)
IT 50-28-2, Estradiol, **analysis** 50-28-2D, Estradiol, metabolites 2479-90-5, Estrone 3-glucuronide 9002-67-9, LH
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, in **urine** of human in ovulation **monitoring**, **method** and **kit** for)

L40 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 1998 ACS
AN 1994:262306 HCAPLUS
DN 120:262306
TI Ovulation **monitoring method**
IN Catt, Michael; Coley, John; Davis, Paul James
PA Unipath Ltd., UK; Unilever PLC; Unilever N. V.
SO PCT Int. Appl., 48 pp.
CODEN: PIXXD2
PI WO 9404925 A1 940303
DS W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, VN
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
AI WO 93-EP2147 930810
PRAI GB 92-17865 920821
DT Patent
LA English
AB A method of monitoring the status of a current ovulation cycle of a human female involves testing the body fluid concn. of an analyte of significance in relation to the status of the ovulation cycle, e.g. urinary estrone 3-glucuronide or estradiol, during at least part of

the preovulation phase of the current ovulation cycle and identification, from the results of such testing, of an analyte concn. change indicative of imminent ovulation, relative to an analyte concn. ref. value based on test data obtained from the same individual during .gtoreq.1 previous ovulation cycle.

IC ICM G01N033-74
ICS G01N033-76; A61B010-00
CC 2-1 (Mammalian Hormones)
IT **Body fluid**
Urine analysis
(estrogen detn. in, of human in ovulation **monitoring**, **method** and **kit** for)
IT Ovulation
(**monitoring** of, estrogen detn. in human urine for, **method** and **kit** for)
IT 50-28-2, Estradiol, **analysis** 50-28-2D, Estradiol, metabolites 2479-90-5, Estrone 3-glucuronide
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, in **urine** of human in ovulation **monitoring**, **method** and **kit** for)

L40 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 1998 ACS
AN 1994:262305 HCAPLUS
DN 120:262305
TI Ovulation **monitoring method, device,** and **kit**
IN Catt, Michael; Coley, John; Davis, Paul James
PA Unilever PLC, UK; Unilever N. V.; Unipath Ltd.
SO PCT Int. Appl., 58 pp.
CODEN: PIXXD2
PI WO 9404926 A1 940303
DS W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, VN
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG
AI WO 93-EP2148 930810
PRAI GB 92-17864 920821
DT Patent
LA English
AB A method of monitoring the status of the current ovulation cycle of a human female to demarcate the infertile, transition, and fertile phases involves testing the body fluid concn. of an analyte of significance in relation to the status of the ovulation cycle, e.g. urinary estrone 3-glucuronide or estradiol, during at least part of the preovulation phase of the current ovulation cycle and identifying, from the results of such testing, an analyte concn. change indicative of imminent ovulation, relative to an analyte concn. ref. value based on test data obtained from the same individual during .gtoreq.1 previous ovulation cycle. Preferably, testing is commenced .gtoreq.5 days following the onset of menses but .gtoreq.2 days in advance of the earliest day on which ovulation occurred in .gtoreq.1 previous ovulation cycle in the same individual. A kit for the assay includes an electronic device which measures and stores optical signal data from the assay and compares them with data from previous cycles.
IC ICM G01N033-74
ICS G01N033-76; A61B010-00
CC 2-1 (Mammalian Hormones)

IT **Body fluid**
Urine analysis
(estrogen detn. in, of human for ovulation **monitoring**, **method** and **kit** for)
IT Ovulation
(**monitoring** of, estrogen detn. in human urine for, **method** and **kit** for)
IT 50-28-2, Estradiol, **analysis** 50-28-2D, Estradiol, metabolites 2479-90-5, Estrone 3-glucuronide
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, in **urine** of human for ovulation **monitoring**, **method** and **kit** for)

L40 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 1998 ACS
AN 1993:146077 HCAPLUS
DN 118:146077
TI Assay for free secretory component (FSC), and **methods** for **monitoring** organ rejection
IN Goldblum, Randall M.; Rajaraman, Srinivasan
PA University of Texas System, USA
SO PCT Int. Appl., 73 pp.
CODEN: PIXXD2
PI WO 9303381 A1 930218
DS W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GR, IT, LU, MC, ML, MR, NL, SE, SN, TD, TG
AI WO 92-US5798 920710
PRAI US 91-736448 910726
DT Patent
LA English
AB Methods are disclosed for monitoring and detecting early onset of organ injury incident to organ rejection in an animal. The described methods are capable of distinguishing organ rejection injury from other organ tissue damage in the animal. FSC levels in the biol. fluid (e.g. blood, urine, bile, amniotic fluid) of an animal may be used to identify organ rejection in an animal. Multiple and single organ transplant patients may be monitored and diagnosed. Biol. fluids are analyzed with an esp. adapted ELISA; FSC levels obtained are compared to control levels to identify elevated FSC values. Animals with test FSC above FSC control concns. are diagnosed as having an ongoing organ rejection episode. The detection of congenital renal dysfunction in utero is also provided via FSC measurement in amniotic fluid. The methods of the invention are specific for indicating organ rejection tissue injury and distinguish kidney rejection tissue injury, in particular, from other causes of kidney injury, e.g. cyclosporin toxicity, urinary tract infection, and urinary obstruction and toxicity (incident to immunosuppressive therapy with cyclosporin). A kit for use in the identification of an organ rejection episode in a patient through measurement of FSC in a biol. sample is also provided. Using a modified ELISA, FSC in a variety of biol. fluids was detd. In anal. of urine samples from renal transplant patients, the FSC concn. and FSC/creatinine ratio in the transplant recipients were frequently much higher than those in normal subjects. More specifically, concns. of urinary FSC were generally higher in the patients with biopsy evidence of allograft rejection, compared to transplant patients with no evidence of rejection on biopsy. The effect of gestational age of FSC concn. in amniotic fluid is also described.

IC ICM G01N033-68
ICS G01N033-58; C12Q001-34; C07K015-28
CC 15-1 (Immunochemistry)
Section cross-reference(s): 9
IT Bile
Blood analysis
Urine analysis
(free secretory component detection in, for diagnosis of organ rejection-assocd. organ injury)
IT Antibodies
RL: BIOL (Biological study)
(to secretory component polymeric IgG complex, in **kit** with free secretory component for diagnosis of graft rejection)
IT Immunoglobulins
RL: BIOL (Biological study)
(A, conjugates, polymeric, with peroxidase, in **kit** with free secretory component for diagnosis of graft rejection)
IT Immunoglobulins
RL: BIOL (Biological study)
(G, complexes, polymeric, with secretory component, antibody to, in **kit** with free secretory component for diagnosis of graft rejection)
IT Immunoglobulins
RL: BIOL (Biological study)
(M, conjugates, with peroxidase, in **kit** with free secretory component for diagnosis of graft rejection)
IT Milk
(human, free secretory component from, in graft rejection diagnosis **kit**)
IT Antibodies
RL: BIOL (Biological study)
(monoclonal, to secretory component polymeric IgG complex, in **kit** with free secretory component for diagnosis of graft rejection)
IT 9003-99-0D, Peroxidase, polymeric IgA or IgM conjugates
RL: USES (Uses)
(in **kit** with free secretory component for diagnosis of graft rejection)

L40 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 1998 ACS
AN 1990:437412 HCAPLUS
DN 113:37412
TI **Methods** for extracting and determining sialic acid in blood plasma and for diagnosing and **monitoring** cancer and diagnostic **kits** therefor
IN Katopodis, Nonda
PA Dianon Systems, Inc., USA
SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2
PI WO 9002332 A1 900308
DS W: AU, JP
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE
AI WO 89-US3238 890726
PRAI US 88-236891 880826
DT Patent
LA English
AB Sialic acid is extd. from blood plasma or serum and detd. by (a) mixing the sample with a lower alc. and a chlorinated lower alkyl hydrocarbon (alc.: hydrocarbon vol. ratio being .apprx.70:30-85:15);

(b) recovering the clear upper phase; and (c) detg. the amt. of sialic acid in a predetd. vol. of the upper phase using an enzyme (e.g. neuraminidase) or resorcinol reagent. Methods and kits for detg. sialic acid in body fluid for cancer diagnosis and monitoring are also described. The methods may be automated. Sialic acid was extd. with MeOH:CHCl2 and detd. in the clear supernatant with neuraminidase. The values obtained correlated better with patients having clin. active cancers than the values obtained by a prior art method.

IC ICM G01N033-48
ICS G01N033-92; C12Q001-70
CC 9-5 (Biochemical Methods)
IT Neoplasm
(diagnosis of, sialic acid extn. from **body fluid** and detn. in)
IT Blood analysis
Body fluid
(sialic acid extn. from and detn. in, for cancer diagnosis)

L40 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 1998 ACS
AN 1988:163133 HCAPLUS
DN 108:163133
TI **Method** and **kit** for biological **monitoring** of foreign substances and determination of their toxicity using thyroxine-binding proteins.
PA Nederlandse Centrale Organisatie voor Toegepast-Natuurwetenschappelijk Onderzoek, Neth.
SO Neth. Appl., 36 pp.
CODEN: NAXXAN
PI NL 8601468 A 880104
AI NL 86-1468 860606
DT Patent
LA Dutch
AB Exogenous substances are monitored in body fluids, and their toxicity is detd., by measuring their binding to thyroxine-binding proteins such as thyroxine-binding prealbumin (transthyretin, I), e.g. by immunoassay. 3H-labeled 3,4,3',4'-tetrachlorobiphenyl (II) binding to plasmid proteins after i.p. injection was analyzed by PAGE under nondenaturing conditions. Of the bound radioactivity, 60% was found in the stacking gel along with chylomicrons and other lipoproteins after 48 h, and 25% was assocd. with I. The kinetics of II binding to I is inversely related to the serum retinol concn. (II appears to inhibit the formation of the I-retinol-binding protein complex which functions as a plasmid transport protein for both retinol and T4; this inhibition is evidently related to the toxicity of II and other PCBs.). The form of II bound to I was shown by HPLC and mass spectrometry to be the 5-hydroxy deriv. of II, a II metabolite. A competitive radioreceptor assay, a competitive RIA, and a competitive ELISA are described for detn. of toxic substances in body fluids; these assays are based on the specific interaction of these substances for their metabolites with thyroxine-binding proteins.
IC ICM G01N033-532
ICS C07K017-00
CC 4-1 (Toxicology)
IT Blood analysis
Body fluid
Cerebrospinal fluid
Milk analysis

Urine analysis
(exogenous substance detn. in, binding by thyroxine-binding proteins in relation to)

IT Prealbumins
Proteins, specific or class
Globulins, biological studies
RL: BIOL (Biological study)
(thyroxine-binding, exogenous substance binding to, in **body fluid**, anal. and toxicity detn. in relation to)

L40 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 1998 ACS
AN 1980:142863 HCAPLUS
DN 92:142863
TI **Apparatus** for **testing** liquids using **test strips**
IN Fischer, Wolfgang; Langkau, Horst
PA Merck Patent G.m.b.H., Fed. Rep. Ger.
SO Ger. Offen., 17 pp.
CODEN: GWXXBX
PI DE 2826651 800103
AI DE 78-2826651 780619
DT Patent
LA German
AB An app. and procedure are used for the fast and simple characterization of liqs., esp. aq. suspensions of enzymes or metabolic products of microorganisms, and are of great value in routine investigations, esp. in the identification of microorganisms. The device consists of test strips held in a series of chambers, which are connected with each other at the top and bottom with a narrow channel, and of a filling inlet, which empties into the chambers. Thus, an unknown bacterial culture was mixed with 3 mL of 1% NaCl soln. and stirred with a glass rod till turbid. Then 1.5 mL of this suspension was pipetted into the app. The suspension distributed itself uniformly in the lower channels, and satd. the bottom of the test strips. Following the addn. of 0.5 mL silicone oil, which sufficed to seal the chamber, the system was incubated in a desiccator for 4 h at 40.degree.. The test strips in the chambers detected the following: glucose breakdown, lysine decarboxylase, citric acid utilization, indole, phenylalanine deaminase, nitrate reductase, H2S, urease, ornithine decarboxylase, and .beta.-galactosidase. Readings were taken at the end of 4 h. Evaluation of the results, as well as literature search, suggested that the bacterial culture was Proteus vulgaris. Similar expts. led to the identification of Escherichia coli and to the diagnosis of diabetes mellitus.
IC G01N031-22; C12K001-04; G01N031-14; G01N033-16
CC 9-4 (Biochemical Methods)
Section cross-reference(s): 10, 14
ST **app test strip** liq; enzyme microorganism detection; diabetes diagnosis **urine analysis**; color **test strip app**
IT **Urine analysis**
(**app.** with reagent **test strips** for)
IT Bacteria
Escherichia coli
Microorganism
Proteus vulgaris
(detection of, **app.** with reagent **test**

strips for)
IT Enzymes
RL: ANT (Analyte); ANST (Analytical study)
(detection of, with **test strips**)
IT Diabetes mellitus
(diagnosis of, **test strips** for **urine anal.** in)
IT Analysis
(biochem., **app.** with reagent **test strips** for)

L41 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:803752 HCAPLUS
DN 128:57434
TI **Test strips** for immunodetection of drugs of abuse and other analytes in **body fluids**
IN Droste, Holger; Linke, Sandra; Aberl, Franz; Bonenberger, Johannes; Sachs, Hans; Goerlach-graw, Ada
PA Boehringer Mannheim G.m.b.H., Germany; Securetec G.m.b.H.
SO Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
PI EP 811847 A2 971210
DS R: AT, CH, DE, ES, FR, GB, IT, LI, NL
AI EP 97-108986 970604
PRAI DE 96-19622503 960605
DT Patent
LA German
AB Multilayer chromatog.-based test strips are described which include a layer for uptake of an analyte from body fluids (including sweat and saliva), an intermediate layer on which a reagent for colorimetric immunoassay is immobilized, and a target layer which shows the presence of the analyte. Examples are given of the detection of cocaine, morphine, and heroin by use of antibody-conjugated prepns. and subsequent detection by color change.
IC ICM G01N033-558
ICA G01N033-94
CC 1-1 (Pharmacology)
Section cross-reference(s): 9
ST **test strip** drug abuse **body fluid**; immunoassay colorimetry drug detection **test strip**
IT IgG
RL: RCT (Reactant)
(coupling of IgG with acetylthiopropionic succinimidyl ester for use in prepg. biotinylated cocaine as hapten for cocaine detection in **body fluids**)
IT Colorimetry
(**test strips** for colorimetric immunodetection of drugs of abuse and other analytes in **body fluids**)
IT **Body fluid**
(**test strips** for immunodetection of drugs of abuse and other analytes in)
IT Drugs of abuse
Immunoassay
Pharmaceutical **analysis**

(**test strips** for immunodetection of drugs of abuse and other **analytes** in **body fluids**)

IT 41093-72-5
RL: RCT (Reactant)
(conversion of morphineacetic acid to its maleimidoethylamide for use in prepg. hapten for morphine detection in **body fluids**)

IT 200347-03-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(conversion of morphineacetic acid to its maleimidoethylamide for use in prepg. hapten for morphine detection in **body fluids**)

IT 84271-78-3
RL: RCT (Reactant)
(coupling of IgG with acetylthiopropionic succinimidyl ester for use in prepg. biotinylated cocaine as hapten for cocaine detection in **body fluids**)

IT 72040-63-2
RL: RCT (Reactant)
(coupling of cocaine polyhapten with biotinylcaproic acid succinimidyl ester for use in prepg. biotinylated cocaine as hapten for cocaine detection in **body fluids**)

IT 163393-00-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction of benzoylecgonine succinimidyl ester with maleimidoethylamine for use in prepg. biotinylated cocaine as hapten for cocaine detection in **body fluids**)

IT 175271-71-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of benzoylecgonine maleimidoethylamide for use in prepg. biotinylated cocaine as hapten for cocaine detection in **body fluids**)

IT 125923-10-6
RL: RCT (Reactant)
(reaction of benzoylecgonine succinimidyl ester with maleimidoethylamine for use in prepg. biotinylated cocaine as hapten for cocaine detection in **body fluids**)

IT 519-09-5, Benzoylecgonine 538-75-0, Dicyclohexylcarbodiimide 6066-82-6, N-Hydroxysuccinimide
RL: RCT (Reactant)
(reaction of benzoylecgonine with hydroxysuccinimide and dicyclohexylcarbodiimide for use in prepg. biotinylated cocaine as hapten for cocaine detection in **body fluids**)

IT 50-36-2, Cocaine
RL: ANT (Analyte); ANST (Analytical study)
(**test strip** for immunocolorimetric assay of cocaine in **body fluids**)

IT 561-27-3, Heroin
RL: ANT (Analyte); ANST (Analytical study)
(**test strip** for immunocolorimetric assay of heroin in **body fluids**)

IT 57-27-2, Morphine, analysis
RL: ANT (Analyte); ANST (Analytical study)
(**test strip** for immunocolorimetric assay of morphine in **body fluids**)

L41 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 1998 ACS

AN 1997:270746 HCAPLUS
DN 126:248563
TI Method and apparatus for **quantitative** and semi-**quantitative** determination of an **analyte**
IN Rylatt, Dennis Brian; Moss, Dean; Jane, Andrew; Bundesen, Peter Gregory
PA Agen Biomedical Limited, Australia; Rylatt, Dennis Brian; Moss, Dean; Jane, Andrew; Bundesen, Peter Gregory
SO PCT Int. Appl., 58 pp.
CODEN: PIXXD2
PI WO 9709620 A1 970313
DS W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, BF, BJ, CF, CG, CH, CI, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
AI WO 96-AU557 960909
PRAI AU 95-5279 950907
DT Patent
LA English
AB A method is described for quant. or semi-quant. detn. of target analyte(s), (e.g., antigens, antibodies, proteins, nucleic acids, hormones carbohydrates, drugs, etc.) in a test sample (e.g., blood, saliva, urine amniotic fluid, etc.), said method comprising the steps of: (1) non-diffusibly attaching to at least one test zone of a lateral flow liq. permeable medium an analyte receptor capable of binding to the target analyte or a predetd. amt. of analyte; (2) diffusibly attaching to a support medium which may comprise the lateral flow liq. permeable medium or a sep. support element an analyte detection agent which detects the presence of target analyte in the test sample, said analyte detection agent having a label assocd. therewith; (3) diffusibly attaching to a support medium which may comprise the lateral flow liq. permeable medium or a sep. support element a calibration agent having a label assocd. therewith; (4) non-diffusibly attaching to at least one calibration zone of the lateral flow liq. permeable medium a calibration agent receptor capable of binding the calibration agent; (5) contacting the lateral flow liq. permeable medium with the test sample; and (6) comparing signals assocd. with each label at the test zone(s) and calibration zone(s) to effect detn. of the target analyte in the test sample. The invention is useful in medical, chem., and environmental testing and veterinary fields, and examples are given of the semi-quant. detn. of fibrin D-dimer, myoglobin, and digoxin by variations of the described method.
IC ICM G01N033-577
ICS G01N033-566; G01N033-545; G01N033-548; G01N033-551
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 1, 15, 80
ST reagent **test strip** immunoassay app; lateral flow membrane app biochem analysis; drug detn reagent **test strip**; blood analysis reagent **test strip**; disease diagnosis reagent **test strip**
IT **Urine analysis**
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(method and app. for quant. and semiquant. **anal.**)

L41 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:363573 HCAPLUS
DN 125:29578
TI Devices and methods utilizing arrays of structures for analyte capture
IN Hansmann, Douglas D.; Grace, John P.; Lowery, Michael G.; Oosta, Gary M.; Loomis, Neil W.; Shain, Eric B.; Schapira, Thomas G.
PA Abbott Laboratories, USA
SO PCT Int. Appl., 42 pp.
CODEN: PIXXD2
PI WO 9610747 A1 960411
DS W: CA, JP
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
AI WO 95-US12462 950929
PRAI US 94-315364 940930
DT Patent
LA English
AB The present invention relates to disposable anal. devices for detg. the presence or amt. of an analyte, e.g., antibody or antigen, in a test sample, e.g., body fluid. The anal. devices comprise an inlet port, a vent, a channel, and an array of structures. The structures have immobilized reagent covalently or non-covalently attached to the surface of the structures. The immobilized reagent captures analyte in the test sample where it is detected by a detection system. The present invention also provides methods and reagents for performing assays utilizing the anal. devices of the present invention. The present invention also provides methods of manufg. the anal. devices of the present invention.
IC ICM G01N033-543
ICS B01L003-00; G01N033-53
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 3, 15, 79, 80
ST antibody antigen detection biol fluid app; immunoassay HIV antibody app analyte capture; **test strip** antibody antigen detection
IT Amniotic fluid
Blood **analysis**
Body fluid
Cerebrospinal fluid
Deoxyribonucleic acid sequence determination
Environmental **analysis**
Food **analysis**
Immobilization, biochemical
Immunoassay
Laminated products
Nucleic acid hybridization
Polymerase chain reaction
Polymer-supported reagents
Saliva
Semen
Soil **analysis**
Sputum
Urine analysis
(app. and method using structure arrays for **analyte** capture)
IT Casting process
Ceramic materials and wares
Electrodeposition and Electroplating
Embossing

Films
Fluoropolymers
Glass, oxide
Hemagglutination
Laser radiation
Molding
Urethane polymers
Acrylic polymers, **analysis**
Metals, **analysis**
Polyamides, **analysis**
Polycarbonates, **analysis**
Polyesters, **analysis**
Polyimides, **analysis**
RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST (Analytical study); USES (Uses)
(app. and method using structure arrays for **analyte** capture)

IT Polymers, **analysis**
RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST (Analytical study); USES (Uses)
(chlorine-contg., app. and method using structure arrays for **analyte** capture)

IT Polymers, **analysis**
RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST (Analytical study); USES (Uses)
(co-, app. and method using structure arrays for **analyte** capture)

IT Spectrochemical **analysis**
(reflection, app. and method using structure arrays for **analyte** capture)

IT Polymers, **analysis**
RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST (Analytical study); USES (Uses)
(silicon-contg., app. and method using structure arrays for **analyte** capture)

IT Polymers, **analysis**
RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST (Analytical study); USES (Uses)
(sulfo-contg., app. and method using structure arrays for **analyte** capture)

IT 7732-18-5, Water, **analysis**
RL: AMX (Analytical matrix); ANST (Analytical study)
(app. and method using structure arrays for **analyte** capture)

IT 9003-53-6, Styrene polymers 9004-34-6, Cellulose, **analysis** 9004-34-6D, Cellulose, esters 9004-70-0, Cellulose nitrate 30604-81-0, Polypyrrole
RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST (Analytical study); USES (Uses)
(app. and method using structure arrays for **analyte** capture)

L41 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:338001 HCAPLUS
DN 125:5045
TI Clinical diagnostic apparatus for detecting analyte in blood, urine or saliva
IN Ookura, Tadahiro; Suzuki, Yoshihiko; Suzuki, Masanori
PA Otax Xo Ltd, Japan; Jiamu Hanbai Kk

SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
PI JP 08075735 A2 960322 Heisei
AI JP 94-238053 940930
PRAI JP 94-56316 940325
JP 94-147564 940629
DT Patent
LA Japanese
AB The invented app. for clin. diagnosis comprises a sampling card and a spectrometric detector with slot for card insertion. Samping card is used to obtain liq. sample (i.e. blood, urine, etc.) and is inserted into the detector for analyte detn. The anal. app. is small in size, is simple to operate, can be automated, is suitable for microanal., and is esp. useful for examn. in small clinics. Diagrams of the app. are presented. The app. is useful for detn. of red blood cell, oxygen concn., glucose, Hb, white blood cell, total cholesterol, HDL-cholesterol, triglyceride, .gamma.-GTP, GOT, GPT, total protein, uric acid, creatinine, BUN, AIDS virus, HIV, etc. in blood or urine.the app. is useful for detn. of red blood cell, oxygen concn., glucose, Hb, white blood cell, total cholesterol, HDL-cholesterol, triglyceride, .gamma.-GTP, GOT, GPT, total protein, uric acid, creatinine, BUN, AIDS virus, HIV, etc. in blood or urine.
IC ICM G01N033-52
ICS A61B005-14; G01N021-75; G01N033-50
CC 9-1 (Biochemical Methods)
IT Acquired immune deficiency syndrome
Blood **analysis**
Erythrocyte
Leukocyte
Saliva
Urine analysis
(clin. diagnostic app. comprises a sampling card and a spectrometric detector with **slot** for card insertion for detecting **analyte** in blood, **urine** or saliva)
IT Hemoglobins
Glycerides, **analysis**
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(clin. diagnostic app. comprises a sampling card and a spectrometric detector with **slot** for card insertion for detecting **analyte** in blood, **urine** or saliva)
IT Proteins, **analysis**
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(total; clin. diagnostic app. comprises a sampling card and a spectrometric detector with **slot** for card insertion for detecting **analyte** in blood, **urine** or saliva)
IT **Analysis**
(app., clin. diagnostic app. comprises a sampling card and a spectrometric detector with **slot** for card insertion for detecting **analyte** in blood, **urine** or saliva)
IT Lipoproteins
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(high-d., clin. diagnostic app. comprises a sampling card and a spectrometric detector with **slot** for card insertion for detecting analyte in blood, urine or saliva)
IT Virus, animal
(human immunodeficiency, clin. diagnostic app. comprises a

sampling card and a spectrometric detector with **slot** for card insertion for detecting analyte in blood, urine or saliva)

IT 7727-37-9, Nitrogen, **analysis**
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(BUN; clin. diagnostic app. comprises a sampling card and a spectrometric detector with **slot** for card insertion for detecting **analyte** in blood, **urine** or saliva)

IT 50-99-7, Glucose, **analysis** 57-13-6, Urea, **analysis** 57-88-5, Cholesterol, **analysis** 60-27-5, Creatinine 69-93-2, Uric acid, **analysis** 7782-44-7, Oxygen, **analysis** 9000-86-6, GPT 9000-97-9, GOT 9002-61-3, Chorionic gonadotropin 9046-27-9, .gamma.-GTP
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(clin. diagnostic app. comprises a sampling card and a spectrometric detector with **slot** for card insertion for detecting **analyte** in blood, **urine** or saliva)

L41 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:337998 HCAPLUS
DN 125:5042
TI **Analysis** apparatus for detecting **analyte** in blood or **urine**
IN Ookura, Tadahiro; Suzuki, Yoshihiko; Suzuki, Masanori
PA Otax Xo Ltd, Japan; Jiamu Hanbai Kk
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
PI JP 08075731 A2 960322 Heisei
AI JP 94-237767 940930
PRAI JP 94-56313 940325
JP 94-147559 940629
DT Patent
LA Japanese
AB The invented app. for clin. diagnosis comprises a sampling card and an spectrometric detector with slot for card insertion. Samping card is used to obtain liq. sample (i.e. blood, urine, etc.) and is inserted into the detector for analyte detn. The anal. app. is small in size, is simple to operate, can be automated, is suitable for microanal., and is esp. useful for examn. in small clinics. Diagrams of the app. are presented. The app. is useful for detn. of red blood cell, oxygen concn., glucose, Hb, white blood cell, total cholesterol, HDL-cholesterol, triglyceride, .gamma.-GTP, GOT, GPT, total protein, uric acid, creatinine, BUN, AIDS virus, HIV, etc. in blood or urine.
IC ICM G01N033-52
CC 9-1 (Biochemical Methods)
ST clin diagnosis app blood **urine analysis**
IT Acquired immune deficiency syndrome
Blood analysis
Diagnosis
Erythrocyte
Leukocyte
Urine analysis
(clin. diagnostic app. comprises sampling card and spectrometric detector with **slot** for card insertion)
IT Hemoglobins
Glycerides, analysis

RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(clin. diagnostic app. comprises sampling card and spectrometric detector with **slot** for card insertion)

IT Proteins, analysis
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(total; clin. diagnostic app. comprises sampling card and spectrometric detector with **slot** for card insertion)

IT Analysis
(app., clin. diagnostic app. comprises sampling card and spectrometric detector with **slot** for card insertion)

IT Lipoproteins
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(high-d., clin. diagnostic app. comprises sampling card and spectrometric detector with **slot** for card insertion)

IT Virus, animal
(human immunodeficiency, clin. diagnostic app. comprises sampling card and spectrometric detector with **slot** for card insertion)

IT 50-99-7, Glucose, analysis 57-13-6, Urea, analysis 57-88-5, Cholesterol, analysis 60-27-5, Creatinine 69-93-2, Uric acid, analysis 7782-44-7, Oxygen, analysis 9000-86-6, GPT 9000-97-9, GOT 9046-27-9, .gamma.-GTP
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(clin. diagnostic app. comprises sampling card and spectrometric detector with **slot** for card insertion)

L41 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:99505 HCAPLUS
DN 124:140372
TI Plasma treatment of polymeric materials to enhance immobilization of analytes thereto
IN Black, William N.
PA Abbott Laboratories, USA
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
PI WO 9534814 A1 951221
DS W: AU, CA, JP
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
AI WO 95-US7500 950613
PRAI US 94-259311 940613
DT Patent
LA English
AB A method is disclosed for treating the surface of a polymeric material of an assay device to increase the sensitivity of diagnostic assays and screening assays. The method involves the treatment of the surface of the polymeric material with unsepd. O plasma to increase the binding capability of an analyte or analyte-binding member to such surface. The treated polymeric material is utilized as a diagnostic assay device or screening assay device for detg. the amt. or presence of an analyte or analyte-binding member in a test sample.
IC ICM G01N033-545
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 14, 15
ST polymer treatment plasma analyte immobilization diagnosis; oxygen

plasma treatment polymer **test strip**; immunoassay
multiwell plate oxygen plasma treatment

IT **Body fluid**
Diagnosis
Immobilization, biochemical
Immunoassay
(plasma treatment of polymeric materials to enhance immobilization of analytes)

IT Antibodies
Antigens
Enzymes
Haptens
Carbohydrates and Sugars, **analysis**
Nucleotides, **analysis**
Proteins, **analysis**
RL: ANT (Analyte); ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(plasma treatment of polymeric materials to enhance immobilization of **analytes**)

IT Polymers, **analysis**
RL: ARU (Analytical role, unclassified); RCT (Reactant); ANST (Analytical study)
(plasma treatment of polymeric materials to enhance immobilization of **analytes**)

IT **Analysis**
(biochem., plasma treatment of polymeric materials to enhance immobilization of **analytes**)

IT **Analysis**
(clin., plasma treatment of polymeric materials to enhance immobilization of **analytes**)

L41 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:662766 HCAPLUS
DN 123:51687
TI Method and apparatus for the determination of analytes.
IN Phillips, Roger; Underwood, Ray; Mcgarraugh, Geoffrey; Jurik, Frank
PA Lifescan, Inc., USA
SO Eur. Pat. Appl., 25 pp.
CODEN: EPXXDW
PI EP 656423 A1 950607
DS R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
AI EP 95-200273 870807
PRAI US 86-896418 860813
EP 87-203031 870807
DT Patent
LA English
AB A method is described for detg. the presence of an analyte in a fluid as well as an app. specifically designed to perform the method. The method involves taking a reflectance reading from one surface of an inert porous matrix impregnated with a reagent that will interact with the analyte to produce a light-absorbing reaction product when the fluid being analyzed is applied to another surface and migrates through the matrix to the surface being read. Reflectance measurements are made at 2 sep. wavelengths to eliminate interferences, and a timing circuit is triggered by an initial decrease in reflectance by the wetting of the surface whose reflectance is being measured by the fluid that passes through the inert matrix. The method and app. are esp. suitable for the detn. of glucose levels in blood without requiring sepn. of red blood

cells from serum or plasma.
IC ICM C12Q001-54
ICS G01N033-52
ICA G01N033-66; G01N021-47
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 13
ST blood glucose detn color **test strip**; **body fluid** analysis color **test strip**; reflection spectrophotometry enzymic **test strip**
IT Blood **analysis**
Body fluid
Membrane, biological
Polymer-supported reagents
(spectrochem. method and reagent **test strip** for detg. **analytes**)
IT Polyamide fibers, **analysis**
Polyamides, **analysis**
Polyester fibers, **analysis**
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(spectrochem. method and reagent **test strip** for detg. **analytes**)
IT Filters and Filtering materials
(micro-, membranes, spectrochem. method and reagent **test strip** for detg. analytes)
IT Spectrochemical **analysis**
(reflection, spectrochem. method and reagent **test strip** for detg. **analytes**)
IT 50-99-7, D Glucose, **analysis**
RL: ANT (Analyte); ANST (Analytical study)
(spectrochem. method and reagent **test strip** for detg. **analytes**)
IT 99-64-9, 3-Dimethylaminobenzoic acid 1128-67-2, 3-Methyl-2-benzothiazolinone hydrazone 9001-37-0, Glucose oxidase 9003-99-0, Peroxidase
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(spectrochem. method and reagent **test strip** for detg. analytes)
IT 77-92-9, Citric acid, **analysis**
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(spectrochem. method and reagent **test strip** for detg. **analytes**)

L41 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1995:640884 HCAPLUS
DN 123:24876
TI Analytical device for diagnostic assays of analytes in liquid samples
IN Gordon, Michael John; Weston, James
PA Cogent Diagnostics Ltd., UK
SO Eur. Pat. Appl., 7 pp.
CODEN: EPXXDW
PI EP 651249 A2 950503
DS R: DE, ES, FR, GB, IT
AI EP 94-308091 941102
PRAI GB 93-22650 931103
DT Patent
LA English

AB An anal. device for detecting analytes in a liq. sample is disclosed having a housing contg. an assay membrane. The flow of liqs. across and through the membrane can be controlled by providing a relatively movable barrier which in one configuration tends to block the flow of liq. through the membrane, thereby directing liq. across the membrane, while relative displacement of the barrier to a 2nd configuration allows liq. to pass through the membrane, e.g. for washing steps. Addnl. or alternatively, the membrane can be movable into and out of contact with absorbent material so that in one configuration in which the membrane is in contact with the absorbent material, liqs. tend to be drawn through the membrane, while in a 2nd configuration in which the membrane is held was from the absorbent material, liqs. tend to flow across the membrane. The device is suitable for diagnostic assays of analytes in liq. samples, such as blood, serum, plasma, saliva, or urine.

IC ICM G01N033-487
ICS G01N033-49; G01N033-493; G01N033-50; G01N033-53

CC 79-2 (Inorganic Analytical Chemistry)
Section cross-reference(s): 9

ST liq sample diagnostic **assay device**

IT Apparatus
Blood **analysis**
Urine analysis
(**anal.** device for diagnostic assays of **analytes** in liq. samples)

L41 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1994:600386 HCAPLUS
DN 121:200386
TI Assays employing dyed microorganism labels.
IN Pronovost, Allan D.; Rowley, Gerald L.
PA Quidel Corp., USA
SO Eur. Pat. Appl., 14 pp.
CODEN: EPXXDW
PI EP 613005 A2 940831
DS R: DE, FR, GB, IT
AI EP 94-301300 940224
PRAI US 93-23670 930225
DT Patent
LA English

AB The present invention relates generally to test articles and assays for the detection of analytes in biol. fluid samples. More particularly, the present invention relates to test articles and assays which employ dyed microorganisms as visual labels to detect suspected analytes. Human chorionic gonadotropin (hCG) was detected in urine samples using a test article contg. Cibacron Brilliant Red 3B-A-dyed Staphylococcus aureus impregnated in the labeling zone, mouse monoclonal antibody (subclass 2a) to hCG impregnated in a sample receiving zone, and a nitrocellulose capture zone impregnated in a line with rabbit F(ab')2 fragment of anti-hCG antibody.

IC ICM G01N033-58
ICS G01N033-543; G01N033-554; G01N033-76

CC 9-1 (Biochemical Methods)
Section cross-reference(s): 2

ST **test strip** dye microorganism label; immunoassay
app microorganism dye label

IT **Analysis**
Blood **analysis**
Dyes

Escherichia coli
Microorganism
Urine analysis
(test articles and assays using dyed microorganisms as visual labels for **analyte** detection)

IT **Analysis**
(app., test articles and assays using dyed microorganisms as visual labels for **analyte** detection)

L41 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1994:477748 HCAPLUS
DN 121:77748
TI Dry reagent three element analyte detection system
IN Aronowitz, Jack L.
PA USA
SO PCT Int. Appl., 52 pp.
CODEN: PIXXD2
PI WO 9412879 A1 940609
DS W: AU, CA, JP
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
AI WO 93-US11482 931124
PRAI US 92-983143 921130
DT Patent
LA English
AB A dry chem. reagent system for the detection of an analyte in a heterogeneous fluid sample includes a pad for preconditioning of the fluid sample supported on the upper surface, and an essentially planar wicking element for facilitating transport and uniform spreading of the sample fluid, an essentially planar porous membrane having a porosity gradient from one planar surface thereof to the other supported on the lower surface, and an aperture-contg. impermeable barrier between said wicking element and said porous membrane. A dry reagent system for detg. total cholesterol had a sample conditioning pad of fiberglass mat contg. Triton X-100, NaCl, and NaNO3; a wicking element of chromatog. filter paper; and a membrane of millipore MF contg. o-tolidine hydrochloride, cholesterol esterase, cholesterol oxidase, peroxidase, citrate buffer, albumin, and polyvinylpyrrolidone. The pad is positioned over the aperture to the wicking layer. Whole blood sample is applied to the pad, the pad is compressed to express the conditioned sample onto the wicking element which spreads the sample over the surface of the membrane. The fluid fraction of the expressed sample is absorbed by the membrane and interacts with the components to produce a color reaction.
IC ICM G01N033-543
CC 9-1 (Biochemical Methods)
ST dry analysis app; cholesterol blood **test strip**
IT Blood **analysis**
(cholesterol or other **analyte** detection in whole, dry **anal.** element for)
IT **Urine analysis**
(chorionic gonadotropin of human detection in, **test strip** for)
IT Membranes
(impregnated with dry chem. reagents, in dry **test strips**)
IT Analysis
Immunoassay
(app., dry **test strips**, with preconditioning

pad and wicking element and porous membrane contg. reagents)
IT Proteins, specific or class
RL: ANST (Analytical study)
(cholesterol-binding, cholesterol release from, in conditioning pad of **test strip** for cholesterol detn.)
IT Immunoassay
(enzyme, **test strips** for)
IT 50-99-7, Glucose, uses 7722-84-1, Hydrogen peroxide, uses 9001-37-0, Glucose oxidase
RL: USES (Uses)
(in membrane of **test strip**)
IT 63482-29-1, Millipore MF
RL: ANST (Analytical study)
(membrane, reagents contg., in **test strip** for cholesterol detn.)
IT 9003-99-0D, Peroxidase, conjugates with human chorionic gonadotropin .beta.
RL: ANST (Analytical study)
(on membrane of **test strip**)
IT 9002-61-3, Chorionic gonadotropin
RL: ANST (Analytical study)
(.beta., of human, labeled with peroxidase, on membrane of **test strip**)

L41 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1994:186742 HCAPLUS
DN 120:186742
TI Fluid-conducting reagent **test strip** with anisotropic membrane and porous transport medium
IN Matzinger, David P.; Zweig, Stephen E.; Yu, Yeung
PA Lifescan, Inc., USA
SO Can. Pat. Appl., 30 pp.
CODEN: CPXXEB
PI CA 2095982 AA 931113
AI CA 93-2095982 930511
PRAI US 92-881970 920512
DT Patent
LA English
AB The invention provides a reagent strip for measuring the concn. of an analyte (e.g. glucose, cholesterol) in a liq. test sample, e.g., whole blood. The reagent strip includes a testing pad contg. a color-forming reagent system specific to the analyte. The testing pad is disposed so that a side with relatively small pores defines a testing surface, and an opposite side with relatively larger pores defines a sample-receiving surface. A porous sample transport medium is attached to the sample-receiving surface. A change in coloration caused by the color-forming reagent system at the testing surface is quant. related to the concn. of the analyte in the liq. test sample. The reagent strip may optionally include a rigid support member which facilitates evaluation of the change in coloration by mech. viewing means. The invention also provides a method for detg. the concn. of an analyte in a liq. test sample. Diagrams of the reagent test strip are included.
IC ICM G01N033-92
ICS G01N033-66; G01N033-52
CC 9-1 (Biochemical Methods)
ST **test strip** anisotropic membrane transport medium; blood analyte color reaction app
IT Blood **analysis**

RL: RCT (Reactant)
(analyte generation in situ from, in threshold colorimetric **assay device**)
IT **Urine analysis**
(uric acid detn. in, threshold colorimetric system for)
IT 1344-28-1, Alumina, **analysis**
RL: ANST (Analytical study)
(controlled-pore, catalytic ring of, in threshold colorimetric device for **analyte** detn.)

L41 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1991:602742 HCAPLUS
DN 115:202742
TI Method and **test strip** for optical detection of an analyte
IN Moddel, Garret R.; Maul, Diana M.; Etter, Jeffrey B.; Starzl, Timothy W.
PA Biostar Medical Products, Inc., USA
SO PCT Int. Appl., 60 pp.
CODEN: PIXXD2
PI WO 9104491 A1 910404
DS W: AU, BR, FI, HU, JP, KR, NO, SU, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE
AI WO 90-US5317 900918
PRAI US 89-408291 890918
DT Patent
LA English
AB A new and useful device is disclosed for use in analyte detection comprising: (a) .gtoreq.1 antireflective layers coated on a support; (b) a top layer of material capable of being activated to interact with a receptive material; (c) a layer of receptive material capable of interaction with the analyte of interest. The top layer of material includes, but is not limited to, Si or a Si compd. These various materials can be chem. activated to covalently bind or adsorb or attach by whatever mechanism to the analyte of interest in a sample. The device undergoes a visual change in color or intensity if the analyte is present in the sample. A Si wafer with a highly polished surface and refractive index of 4.09 was coated with antireflective Si oxynitride to a thickness of 560-565 .ANG.. The device was activated by application of N-(2-aminoethyl)-3-aminopropyltrimethoxysilane. Receptive material was adhered by treatment with glutaraldehyde and IGAP (synthetic polypeptide covering the active region of protein A) and then with monoclonal antibody specific for carcinoembryonic antigen (CEA). Unbound material was rinsed off and the golden tan device was then used to det. the presence of CEA in serum samples. Pos. samples gave small pinkish spots with color intensities which correlated with increasing analyte concn.
IC ICM G01N033-543
CC 9-5 (Biochemical Methods)
Section cross-reference(s): 15, 79, 80
ST spectrochem analysis **test strip**; colorimeter multilayer **test strip**; carcinoembryonic antigen immunoassay colorimeter strip
IT Spectrochemical **analysis**
(**analyte** detection by, device with antireflective and **analyte**-receiving layers for)
IT Films
Gels

(as substrate supporting antireflective material and **analyte**-receiving material, for **analyte** spectrochem. **anal.**)

IT Nonmetals
Plastics
Metals, uses and miscellaneous
Polymers, uses and miscellaneous
RL: USES (Uses)
(as substrate supporting antireflective material and **analyte**-receiving material, for **analyte** spectrochem. **anal.**)

IT Glass, oxide
RL: ANST (Analytical study)
(as support for antireflective material and **analyte**-receiving material, for **analyte** spectrochem. **anal.**)

IT **Urine analysis**
(colorimetric, for pregnancy detection, device for)

IT Pregnancy
(detection of **analyte** indicating, spectrochem. **anal. test strip** for)

IT Bacteria
(detection of, spectrochem. anal **test strip** for)

IT Haptens
Rheumatoid factors
RL: ANT (Analyte); ANST (Analytical study)
(detection of, spectrochem. anal **test strip** for)

IT Neoplasm
(marker of, detection of, spectrochem. anal. **test strip** for)

IT Antigens
RL: ANT (Analyte); ANST (Analytical study)
(CEA (carcinoembryonic antigen), detection of, spectrochem. anal **test strip** for)

IT Spectrochemical **analysis**
(IR, **analyte** detection by, device with antireflective and **analyte**-receiving layers for)

IT Spectrochemical **analysis**
(UV, **analyte** detection by, device with antireflective and **analyte**-receiving layers for)

IT Disease
(autoimmune, detection of **analyte** indicating, spectrochem. **anal. test strip** for)

IT Spectrochemical **analysis**
(colorimetric, **analyte** detection by, device with antireflective and **analyte**-receiving layers for)

IT Streptococcus
(group A, detection of, spectrochem. anal **test strip** for)

IT 1760-24-3
RL: ANST (Analytical study)
(**analyte**-receiving material binding to antireflective material on silicon wafer by, in prepn. of spectrochem. **anal.** device)

IT 11105-01-4, Silicon oxynitride
RL: ANST (Analytical study)
(as antireflective material on substrate of device for

analyte spectrochem. **anal.**)
IT 1303-86-2, Boron oxide, uses and miscellaneous 1306-23-6, Cadmium sulfide (CdS), biological studies
RL: USES (Uses)
(as antireflective material on substrate of device for **analyte** spectrochem. **anal.**)
IT 7440-21-3, Silicon, uses and miscellaneous 7440-47-3, Chromium, uses and miscellaneous
RL: USES (Uses)
(as substrate supporting antireflective material and **analyte**-receiving material, for **analyte** spectrochem. **anal.**)
IT 50-67-9P, Serotonin, analysis
RL: ANT (Analyte); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation)
(detection of, **test strip** for, prepn. of)
IT 9004-54-0D, Dextran, reaction products with aminosilane-coated substrate
RL: ANST (Analytical study)
(in prepn. of **test strip** for serotonin detection)

L41 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1991:404726 HCAPLUS
DN 115:4726
TI Method for detecting antigenic substances in fluid samples with immunoassay **test strips** without the need for multiple steps or washing
IN Gould, Martin; Vulimiri, Sudhakar
PA Ampcor, Inc., USA
SO PCT Int. Appl., 63 pp.
CODEN: PIXXD2
PI WO 9015328 A1 901213
DS W: AU, BB, BG, BR, CA, DK, ES, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, RO, SD, SU
RW: AT, BE, BF, BJ, CF, CG, CH, CM, DE, FR, GA, GB, IT, LU, ML, MR, NL, SE, SN, TD, TG
AI WO 90-US3222 900606
PRAI US 89-361878 890606
US 89-447594 891208
US 90-530182 900604
DT Patent
LA English
AB An immunoassay process for detg. an antigenic substance [e.g. human chorionic gonadotropin (HCG)] in a fluid sample (e.g. serum) without the need for multiple steps or washing involves: (1) contacting a fluid sample with a labeled capture reagent against an antigenic substance to be assayed (e.g. alk. phosphatase-labeled anti-HCG monoclonal antibody), (2) contacting the fluid sample and the labeled captive reagent with a carrier membrane (adhered to a support) having bound to the surface thereof an effective amt. of a bound capture reagent against the test antigenic substance (e.g. polyclonal antibody to .beta.-HCG), and (3) detg. whether the labeled capture reagent is bound to the solid carrier. The carrier membrane (on dip stick-type test strip) is pretreated with e.g. goat serum, casein, and then borate buffer optionally contg. mannitol to block the bound immunol. active agent against nonsp. binding of components in the assay system. The carrier membrane is used to sep. an immunol. complex from a reaction soln. An app. (device) for

the immunoassay also is claimed.
IC ICM G01N033-551
ICS G01N033-543
CC 9-10 (Biochemical Methods)
Section cross-reference(s): 1, 2, 17, 60
ST analyte immunoassay **test strip**; chorionic gonadotropin EIA **test strip**; blood chorionic gonadotropin EIA **test strip**
IT Syrups
(analyte detn. in fluid samples with immunoassay **test strip** pretreated with buffer contg., to inhibit nonsp. binding)
IT Oligosaccharides
RL: ANST (Analytical study)
(analyte detn. in fluid samples with immunoassay **test strip** pretreated with buffer contg., to inhibit nonsp. binding)
IT Carbohydrates and Sugars, uses and miscellaneous
RL: USES (Uses)
(analyte detn. in fluid samples with immunoassay **test strip** pretreated with buffer contg., to inhibit nonsp. binding)
IT Blood serum
Buffer substances and systems
(analyte detn. in fluid samples with immunoassay **test strip** pretreated with, to inhibit nonsp. binding)
IT Caseins, uses and miscellaneous
Proteins, uses and miscellaneous
RL: USES (Uses)
(analyte detn. in fluid samples with immunoassay **test strip** pretreated with, to inhibit nonsp. binding)
IT **Body fluid**
Culture media
Food analysis
(antigenic substance detn. in, with immunoassay **test strips** without need for multiple steps or washing)
IT Latex
(carrier membrane, in immunoassay **test strips** for analyte detn. in fluid samples without need for multiple steps or washing)
IT Glass, oxide
Glass fibers, uses and miscellaneous
Polyamides, uses and miscellaneous
RL: USES (Uses)
(carrier membrane, in immunoassay **test strips** for analyte detn. in fluid samples without need for multiple steps or washing)
IT Blood **analysis**
Urine analysis
(chorionic gonadotropin or other **analyte** detn. in, with immunoassay **test strip** without need for multiple steps or washing)
IT Enterobacter
Escherichia coli
Klebsiella
Proteus (bacterium)
Salmonella
Staphylococcus
(detection of, in fluid samples, with immunoassay **test**

strip without need for multiple steps or washing)
IT Bacteria
Pseudomonas aeruginosa
Staphylococcus epidermidis
Streptococcus
Virus
(detn. of, in fluid samples, with immunoassay **test strips** without need for multiple steps or washing)
IT Antigens
Hormones
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, in fluid samples, with immunoassay **test strips** without need for multiple steps or washing)
IT Antibodies
RL: ANST (Analytical study)
(immobilized, in immunoassay **test strips** for analyte detn. in fluid samples without need for multiple steps or washing)
IT Milk
(proteins of, analyte detn. in fluid samples with immunoassay **test strip** pretreated with, to inhibit nonsp. binding)
IT Microorganism
(urinary tract infection-related, detn. of, in fluid samples, with immunoassay **test strips** without need for multiple steps or washing)
IT Urinary tract
(disease, infection, microorganisms causing, detn. of, in fluid samples, with immunoassay **test strips** without need for multiple steps or washing)
IT Immunochemical **analysis**
(enzyme immunoassay, in **analyte** detn. in fluid samples with **test strips** without need for multiple steps or washing)
IT Glycosides
RL: ANST (Analytical study)
(glucopyranosides, analyte detn. in fluid samples with immunoassay **test strip** pretreated with buffer contg., to inhibit nonsp. binding)
IT Immunochemical **analysis**
(immunoassay, in **analyte** detn. in fluid samples with **test strips** without need for multiple steps or washing)
IT Mononucleosis
(infectious, antibody to, detn. of, in **body fluids**, with immunoassay **test strip** without need for multiple steps or washing)
IT Streptococcus
(intestinal, detection of, in fluid samples, with immunoassay **test strip** without need for multiple steps or washing)
IT Lupus erythematosus
(systemic, antibody to, detn. of, in **body fluids**, with immunoassay **test strip** without need for multiple steps or washing)
IT 50-70-4, Sorbitol, uses and miscellaneous 50-99-7, Glucose, uses and miscellaneous 57-48-7, Fructose, uses and miscellaneous 57-50-1, Sucrose, uses and miscellaneous 58-86-6, Xylose, uses and miscellaneous 69-65-8, Mannitol 69-79-4, Maltose

RL: USES (Uses)
(analyte detn. in fluid samples with immunoassay **test strip** pretreated with buffer contg., to inhibit nonsp. binding)

IT 7732-18-5, Water, analysis
RL: ANST (Analytical study)
(antigenic substance detn. in, with immunoassay **test strips** without need for multiple steps or washing)

IT 77-86-1 5625-37-6, 1,4-Piperazinediethanesulfonic acid 7365-45-9 14213-97-9, Borate (BO33-) 14265-44-2, Phosphate, uses and miscellaneous
RL: ANST (Analytical study)
(buffer, analyte detn. in fluid samples with immunoassay **test strip** pretreated with, to inhibit nonsp. binding)

IT 9002-84-0, Polytetrafluoroethylene 9002-85-1, Polyvinylidene chloride 9002-86-2, Polyvinyl chloride 9002-88-4, Polyethylene 9003-01-4 9003-07-0, Polypropylene 9003-21-8 9003-29-6, Polybutylene 9003-53-6, Polystyrene 9004-34-6, Cellulose, biological studies 9010-79-1
RL: ANST (Analytical study)
(carrier membrane, in immunoassay **test strips** for analyte detn. in fluid samples without need for multiple steps or washing)

IT 25038-59-9, biological studies
RL: BIOL (Biological study)
(carrier membrane, in immunoassay **test strips** for analyte detn. in fluid samples without need for multiple steps or washing)

IT 9002-61-3, Chorionic gonadotropin
RL: ANST (Analytical study)
(detn. of human, in **body fluids**, with immunoassay **test strip** without need for multiple steps or washing)

IT 58-55-9, Theophylline, analysis 20830-75-5, Digoxin
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, in blood serum, with immunoassay **test strip** without need for multiple steps or washing)

L41 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1991:58472 HCAPLUS
DN 114:58472
TI **Analyte assay device** and apparatus for blood **analysis**
IN Hewett, Gary
PA Cholestech Corp., USA
SO PCT Int. Appl., 35 pp.
CODEN: PIXXD2
PI WO 9010869 A1 900920
DS W: AU, CA, FI, JP, KR, NO, SU
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE
AI WO 90-US1249 900306
PRAI US 89-320474 890308
DT Patent
LA English
AB The title app. and device are provided for use in detg. the concn. of selected analytes in a body-fluid sample, esp. blood. The device includes a sample dispenser designed to distribute a small-vol. blood sample to multiple transfer sites by capillary flow of the

blood sample through sieving and distributing matrixes which sep. blood cells from serum as the sample fluid migrates toward the transfer sites. A test plate in the device carries >1 absorbent test pads, each contg. reagent components for use in detection of a single analyte. The test plate is mounted on the dispenser for movement toward and away from a transfer position at which the exposed surface regions of the pads are in contact with assocd. sample-transfer sites for simultaneous transfer of sample fluid from such sites to the pads in the support. The app. is designed for use in transferring a uniform, quantifiable amt. of sample fluid to each of the pads in the device. The app. may be used for detg. >1 analytes, e.g. serum cholesterol and lipoproteins, in a small-vol. blood sample. Schematic diagrams of the device and app. are included. Reflectance measurements showed that each of 3 pads was wetted completely at about the same rate.

IC ICM G01N033-52
ICS B01L003-00; G01N033-92; C12Q001-60
CC 9-1 (Biochemical Methods)
IT **Body fluid**
(analyte detn. in, app. for)

L41 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1989:511977 HCAPLUS
DN 111:111977
TI Diagnostic **test strips** comprising outer porous membranes and unerlying reagent matrices and their manufacture
IN Bransgrove, Anthony Brandon
PA National Diagnostic Products (Australia) Pty. Ltd., Australia
SO PCT Int. Appl., 16 pp.
CODEN: PIXXD2
PI WO 8809824 A1 881215
DS W: AU, BR, DK, JP, NO, SU, US
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE
AI WO 88-AU171 880606
PRAI AU 87-2329 870605
DT Patent
LA English
AB A diagnostic test device for detection and quantitation of analytes in the cell- and particle-free fraction of biol. fluids comprises an outer porous membrane and an underlying absorbent carrier matrix contg. predetd. reagents to bring about a graduated response to specific analyte(s). The membrane serves as a filter and a robust wipe-off surface. The device is manufd. by forming a porous matrix on an inert substrate or support, impregnating the matrix with reagents, chromogens, and optionally reflectants, and forming an outer membrane on the matrix from a H2O-stable film-forming polymer. A test strip to measure blood glucose was prepd. contg. a substrate of polycarbonate film; a matrix of .epsilon. polycaprolactam impregnated with chromogen, 6% hydrolyzed Gantrey AN 149 (protective colloid), glucose oxidase, horseradish peroxidase, and stabilizers; and a filter layer of 50% polyvinylpropylene-polyvinylchloride copolymer (Propiofan 325D BASF), Na phosphate pH 7.0, and 10% dioctyl Na sulfosuccinate. Response was obvious after 30 s of blood contact.
IC C12Q001-26; C12Q001-54; C12Q001-60; G01N033-49; G01N033-92
CC 9-1 (Biochemical Methods)
ST diagnostic **test strip** porous membrane; blood glucose **test strip** polymer membrane
IT Blood **analysis**

Body fluid
(**analyte** detn. in, by diagnostic **test strip**)
IT Polyamides, uses and miscellaneous
RL: USES (Uses)
(diagnostic **test strip** contg. outer porous membrane filter and)
IT Membranes
(diagnostic **test strip** contg. reagent-impregnated matrix and outer porous)
IT Polymers, uses and miscellaneous
RL: USES (Uses)
(diagnostic **test strip** contg. underlying reagent-impregnated matrix and, as outer porous membrane filter)
IT Diagnosis
(**test strip** contg. reagent-impregnated matrix and outer porous membrane filter for)
IT 50-99-7, D-Glucose, analysis 57-88-5, Cholesterol, analysis
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, in biol. fluid by diagnostic **test strip**)
IT 9004-34-6, Cellulose, uses and miscellaneous 25038-54-4, .epsilon. Polycaprolactam, uses and miscellaneous
RL: USES (Uses)
(diagnostic **test strip** contg. outer porous membrane filter and)
IT 76363-97-8, Propiofan 325D
RL: ANST (Analytical study)
(diagnostic **test strip** contg. underlying reagent-impregnated matrix and, as outer porous membrane filter)

L41 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1988:434835 HCAPLUS
DN 109:34835
TI A rainbow test device and compositions for the visual determination of glucose and other analytes
IN Albarella, James P.; Charlton, Steven C.; Reinsch, James W.; Warchal, Mary Ellen
PA Miles Laboratories, Inc., USA
SO Eur. Pat. Appl., 82 pp.
CODEN: EPXXDW
PI EP 239926 A2 871007
DS R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
AI EP 87-104429 870325
PRAI US 86-848706 860404
DT Patent
LA English
AB Test compns. and test devices are provided which generate different hues at different analyte concns. The compns. are capable of generating a yellow hue in situ. Clin. important analytes, such as glucose, are detd. visually in a body fluid by use of 2 independent catalytic systems which react with NADH to produce a range (rainbow) of hues, the particular hue produced depending on the concn. of the analyte. A test device for glucose detn. comprised 2 gelatin layers contg. (1) 2-(4-iodophenyl)-3-(4-nitrophenyl)-5-phenyltetrazolium chloride (I) and (2) 2,6-dichloroindophenol, K3Fe(CN)6, DTNB, glucose dehydrogenase, NAD, 1-methoxyphenazine methosulfate, glutathione reductase, glutathione, and mutarotase. The gelatin was crosslinked with carbodiimide to provide a hardened surface which

could be wiped. The 2 catalytic pathways were: (1) 1-methoxyphenazine methosulfate-2,6-dichloroindophenol-I; (2) glutathione reductase-glutathione-DTNB. The sequence of colors over the glucose concn. range 110-800 mg/dL was blue to rose to burgundy. Prepns. of certain indicators are described. 3-Carboxy-4-nitrophenyl disulfide was converted to the acid chloride and amidated with 3-dimethylaminopropylamine. The amide was water sol. and useful as a thiol indicator.

IC ICM C12Q001-00
ICA C12Q001-54; G01N033-52
CC 9-1 (Biochemical Methods)
ST glucose detn **test strip**; catalyst indicator colorimetric analysis
IT **Body fluid**
(**anal**. of, colorimetric, catalysts and indicators for, **analyte concn**.-dependent rainbow hue prodn. in relation to)
IT Thiols, uses and miscellaneous
RL: USES (Uses)
(as indicators, for colorimetric **anal**., **analyte concn**.-dependent rainbow hue prodn. in relation to)
IT Catalysts and Catalysis
Indicators
(for colorimetric **anal**., **analyte concn**.-dependent rainbow hue prodn. in relation to)
IT Spectrochemical **analysis**
(colorimetric, catalysts and indicators for, **analyte concn**.-dependent rainbow hue prodn. in relation to)
IT Albumins, compounds
RL: SPN (Synthetic preparation); PREP (Preparation)
(conjugates, with DTNB, prepn. of, for colorimetric **anal**., **analyte concn**.-dependent rainbow hue prodn. in relation to)
IT 69-78-3, 5,5'-Dithiobis(2-nitrobenzoic acid) 146-68-9 298-83-9, p-Nitro blue tetrazolium chloride 299-11-6, Phenazine methosulfate 956-48-9, 2,6-Dichloroindophenol 65162-13-2, 1-Methoxyphenazine methosulfate 98311-86-5 115215-72-0 115233-88-0
RL: ANST (Analytical study)
(in colorimetric **anal**., **analyte concn**.-dependent rainbow hue prodn. in relation to)
IT 69-78-3DP, DTNB, albumin conjugates
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, for colorimetric **anal**., **analyte concn**.-dependent rainbow hue prodn. in relation to)

L41 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1987:473822 HCAPLUS
DN 107:73822
TI Integral multilayered analysis elements and their use in **body fluid** analysis for clinical diagnosis
IN Furuya, Shin; Imai, Toshio; Hiratsuka, Nobuo; Ikeda, Tetsupei; Kondo, Asaji
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
PI JP 62103542 A2 870514 Showa
AI JP 86-166587 860717
PRAI JP 85-161379 850722
DT Patent

LA Japanese
AB An integral multilayered anal. element for body fluid anal. consists of a light-transmitting, water-nonpermeable support layer, a chemiluminescent reagent layer contg. chemiluminescent reagents and a water-swelling or sol. polymer binder, and a spreading layer that spreads a fluid sample to the reagent layer, in that order. A transparent polyethylene terephthalate support was coated with gelatin, followed by coating with a mixt. contg. luminal in 25 mM NaOH, peroxidase and glucose oxidase in 220 mM Tris-HCl buffer (pH 8.5), gelatin in the same buffer, and 1,2-bis(vinylsulfonylacetamido)ethane, and covering with broadcloth (spreading layer). A sample contg. glucose was spotted on the test element for anal. The reagent layer swelled by .apprx.250%. The light transmittance was homogeneous.
IC ICM G01N021-76
ICS G01N031-22; G01N033-52
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 7
ST **test strip body fluid** analysis
IT Blood **analysis**
Body fluid
(**analyte** detn. in, integral multilayered **anal**. element based on chemiluminescence test for)
IT 50-99-7, Glucose, analysis 56-65-5, ATP, analysis 9001-15-4
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, in **body fluid**, integral multilayered anal. element based on chemiluminescence test for)
IT 521-31-3, Luminol 55963-96-7, Luciferin 66710-66-5
RL: ANST (Analytical study)
(multilayered anal. element contg., for **body fluid** anal.)

L41 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1987:210538 HCAPLUS
DN 106:210538
TI Test elements for microanalysis of fluid samples
IN Ito, Tsukasa; Kawakatsu, Satoru; Onishi, Akira; Ishikawa, Masayo
PA Konishiroku Photo Industry Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF
PI JP 61292060 A2 861222 Showa
AI JP 85-131955 850619
DT Patent
LA Japanese
AB A multilayered test element for microdetn. of a component in a fluid sample (e.g. body fluid), based on a competitive binding reaction of the test component and labeled test component (e.g. enzyme-labeled) with a substance (e.g. antibody) that specifically binds to the test component, consists of a reaction layer contg. the substance that specifically binds to the test component and an adsorbing layer contg. a substance (e.g. enzyme inhibitor, antibodies to the label) that specifically binds to the label to remove the excess label to ensure accurate anal. Thus, for human IgG detn., 2 Toyo filter papers No. 50 (2 .times. 2 in) were treated with a BrCN soln. and then either with a goat anti-human IgG antibody or with a goat anti-peroxidase antibody and freeze dried. A polyethylene terephthalate film and the 2 treated filter papers were laminated to form a test strip. A 10-.mu.L sample contg. human IgG was added to

the test strip, followed by adding 10 .mu.L of a peroxidase-labeled human IgG soln. and then 40 .mu.L of a soln. contg. o-phenylenediamine and H2O2. The reflection d at 492 nm was measured for the detn. of human IgG. As low as 5 .mu.g IgG/mL can be detected.

IC ICM G01N033-543
ICA A61K039-00
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 15
ST multilayered test element **body fluid** microanal; human IgG detn multilayered **test strip**
IT **Body fluid**
(**analyte** microdetn. in, multilayered **anal.** elements for)

L41 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1986:105628 HCAPLUS
DN 104:105628
TI Indicator for **body fluids**
IN Omoto, Kouichi; Miyazaki, Takeshi
PA Dainippon Printing Co., Ltd. , Japan
SO Ger. Offen., 67 pp.
CODEN: GWXXBX
PI DE 3506365 A1 850829
AI DE 85-3506365 850222
PRAI JP 84-33787 840224
DT Patent
LA German
AB An indicator for the detn. of glucose, protein, urobilinogen, blood, or pH in body fluids consists of the appropriate reagents compressed into a form that can be easily and directly imprinted on a support. The use of compressed reagents imprinted on test strips imparts stability to the reagents and allows the test strip to be handled without effecting the integrity of the reagents. Thus, an indicator for glucose detection was prepd. from glucose oxidase, peroxidase, p-tolidine, isobutylene-maleic anhydride butanol ester, DL-.alpha.-tocopherol, polyoxyethylenesorbital monooleate, microcryst. cellulose, yellow 6, n-butanol, citric acid, and Na citrate. The components were mech. dispersed, imprinted on a white polystyrene foil, and the test strip dried for 30 min at 60.degree.. The indicator was contacted to a urine sample contg. a known glucose concn. whereby color rapidly developed. The indicator is easy to use and permits glucose detection between 20 and 100 mg/dL.
IC ICM G01N033-52
ICS C12Q001-54
CC 9-1 (Biochemical Methods)
ST glucose detn indicator **test strip**; protein detn indicator **test strip**; blood detn indicator **test strip**; uribilinogen detn indicator **test strip**; pH detn **body fluid test strip**; **body fluid** indicator **test strip**
IT Proteins
Urobilinogens
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, in **body fluids, test strip** for)
IT Blood **analysis**
Body fluid

Urine analysis
(glucose and other **analytes** detn. in, **test strip** for)
IT Aromatic hydrocarbons, uses and miscellaneous
RL: ANST (Analytical study)
(**test strip** contg., for glucose and other analyte detection in **body fluids**)
IT Quaternary ammonium compounds, uses and miscellaneous
RL: USES (Uses)
(**test strip** contg., for glucose and other analyte detection in **body fluids**)
IT Tocopherols
RL: ANST (Analytical study)
(**test strip** contg., for glucose and other analyte detn. in **body fluids**)
IT Vinyl acetal polymers
RL: ANST (Analytical study)
(butyrals, resin, **test strip** contg., for glucose and other analyte detn. in **body fluids**)
IT 50-99-7, analysis
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, in **body fluids**, **test strip** for)
IT 51-79-6
RL: ANST (Analytical study)
(resin, **test strip** contg., for glucose and other analyte detn. in **body fluids**)
IT 68-04-2 76-59-5 77-92-9, biological studies 80-15-9 83-07-8 95-53-4, uses and miscellaneous 100-10-7 108-94-1, biological studies 110-80-5 111-76-2 1333-68-2 1342-59-2 2074-53-5 4430-25-5 9004-32-4 9004-34-6, biological studies 9004-62-0 9039-01-4 11099-07-3 26299-60-5 37267-86-0 37337-83-0 58856-61-4 72642-93-4 79873-37-3
RL: ANST (Analytical study)
(**test strip** contg., for glucose and other analyte detection in **body fluids**)
IT 56-81-5D, esters 110-16-7D, polymers 9003-39-8 9004-62-0 14798-03-9D, quaternary salts
RL: ANST (Analytical study)
(**test strip** contg., for glucose and other analyte detn. in **body fluids**)
IT 9003-99-0
RL: ANST (Analytical study)
(**test strip** contg., for glucose detn.)
IT 9001-37-0
RL: USES (Uses)
(**test strip** contg., for glucose detn.)

L41 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1986:84917 HCAPLUS
DN 104:84917
TI Tester for detecting a substance in a **body fluid**
IN Kaminagayoshi, Satoshi
PA Terumo Corp., Japan
SO Eur. Pat. Appl., 21 pp.
CODEN: EPXXDW
PI EP 158964 A2 851023
DS R: BE, DE, FR, IT

AI EP 85-104308 850410
PRAI JP 84-79915 840420
DT Patent
LA English
AB An improved tester for detecting a substance in body fluid (particularly detection of glucose or bilirubin in urine or blood) is designed to prevent contaminating reducing substances present in the specimen from exerting an interfering effect on a test based on H2O2 or hydroxyperoxide detn. The tester utilizes a peroxidase type reaction or diazo coupling reaction and is adapted to change color in d. corresponding to the concn. of the substance. The method involves contacting a liq. sample contg. the reducing substance to an oxidizing film (prepd. by dissolving NaIO4 as oxidizing agent in aq. Me cellulose, then immersing a nylon net in the soln., and depositing the film on a stick to form a test strip). Thus, a test strip for glucose detn. was impregnated with citrate, glucose oxidase and peroxidase followed by o-tolidine and acetone. The tester was immersed in an urine sample contg. glucose 150 and ascorbic acid 50 mg/dL. Glucose was detected in the sample despite ascorbate presence.
IC ICM C12Q001-28
ICS C12Q001-54; G01N033-52; G01N033-72
CC 9-2 (Biochemical Methods)
ST **test strip** oxidizer film analyte detn; glucose detn urine oxidizer **test strip**
IT Blood **analysis**
Urine analysis
(**analyte** detn. in, **test strip** for, oxidizing agent in)
IT Plastics
Glass fibers, uses and miscellaneous
RL: USES (Uses)
(**test strip** contg. oxidizing agent and, for analyte detn. in **body fluids**)
IT Oxidizing agents
(**test strip** contg., for analyte detn. in **body fluids**)
IT Salts, uses and miscellaneous
RL: USES (Uses)
(**test strip** contg., for analyte detn. in **body fluids**)
IT Coupling reaction
(azo, analyte detn. based on, **test strip** contg. oxidizing agent for)
IT Acids, uses and miscellaneous
RL: ANST (Analytical study)
(oxo, **test strip** contg., for analyte detn. in **body fluids**)
IT 9003-99-0
RL: ANST (Analytical study)
(analyte detn. in **body fluids** with **test strip** contg. oxidizing agent and)
IT 50-99-7, analysis 635-65-4, analysis 14797-55-8, analysis
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, **test strip** for, oxidizing agent in)
IT 50-81-7, uses and miscellaneous
RL: USES (Uses)
(glucose detn. in **body fluids** in presence of,

test strip for)
IT 60-00-4D, metal complexes 592-63-2 4180-12-5 7758-89-6
7758-98-7, biological studies 7790-28-5 13444-71-8 29094-03-9
RL: ANST (Analytical study)
(**test strip** contg., for analyte detn. in
body fluids)

L41 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 1998 ACS
AN 1985:556707 HCAPLUS
DN 103:156707
TI Multi-center evaluation of the urine **test strip** analyzer Rapimat
AU Haeckel, R.; Bonini, P.; Ceriotti, G.; Kutter, D.; Vonderschmitt, D. J.
CS Zentralkrankenhaus, Bremen, D-2800/1, Fed. Rep. Ger.
SO J. Clin. Chem. Clin. Biochem. (1985), 23(8), 473-92
CODEN: JCCBDT; ISSN: 0340-076X
DT Journal
LA English
AB The performance of the Rapimat test strip analyzer was evaluated in 4 labs. for the detn. of various analytes in human urine by using the Rapignost test strips, and the applicability of the ECCLS guidelines (designed for spectrometry) to the evaluation of the Rapimat analyzer (which is based on reflectance measurements) was also examd. The Rapimat is easy to operate and reliable for the automation of urinalysis; but the sensitivity of the Rapignost test strips should be improved. During the 6-mo observation period, the system operated without breakdowns. The only serious problems of clin. significance encountered was the inability of the instrument to recognize atypical colors. Therefore, it is recommended that warnings are included in the instruction manual, esp. with respect to bilirubin and urobilinogen reactions. The ECCLS guidelines were applicable to the Rapinat analyzer evolution.
CC 9-5 (Biochemical Methods)
ST **urine analysis** Rapimat analyzer evaluation; reflectometer evaluation **test strip** **urine**; automated reflectometry **test strip** **urine**
IT **Urine analysis**
(**analyte** detn. in, of humans by colored **test strips** and reflectometry, Rapimat analyzer evaluation of)
IT Hemoglobins
Urobilinogens
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, in urine of humans by color **test strips** and reflectometry, Rapimat analyzer evaluation for)
IT Spectrochemical **analysis**
(reflection, for urobilinogens, of human **urine**, with Rapimat analyzer)
IT 50-81-7, **analysis** 50-99-7, **analysis**
541-50-4, **analysis** 635-65-4, **analysis**
14797-65-0, **analysis**
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, in **urine** of humans by color **test strips** and reflectometry, Rapimat analyzer evaluation for)

L41 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 1998 ACS

AN 1983:50003 HCAPLUS
DN 98:50003
TI Photometric assistant and **test strips** for determining the **concentration** of different **analytes** in a solution
IN Maines, Robert
PA Harvey, R. J., Instrument Corp., USA
SO Ger. Offen., 28 pp.
CODEN: GWXXBX
PI DE 3214939 A1 821202
AI DE 82-3214939 820422
PRAI US 81-257860 810427
DT Patent
LA German
AB Reaction cuvettes or test strips composed of Nylon 4 are described for photometric blood or urine anal. The cuvettes can be used, for example, for counting blood cells or measuring their agglutination. The test strips can be coated with enzymes or chromogens and are used, for example, for glucose detn.
IC G01N021-17; G01N021-03
CC 9-1 (Biochemical Methods)
ST nylon cuvette **test strip** photometry; blood enzymic **analysis test strip**; **urine** enzymic **analysis test strip**
IT Enzymes
RL: ANST (Analytical study)
(nylon **test strips** contg., for blood or **urine** photometric **anal.**)
IT Blood analysis
Urine analysis
(photometric, nylon **test strips** for)
IT Onium compounds
RL: ANST (Analytical study)
(tetrazolium, nylon **test strips** contg., for blood or **urine** photometric **anal.**)
IT 24938-56-5
RL: ANST (Analytical study)
(cuvettes or **test strips** of, for blood or **urine** photometric **anal.**)
IT 50-99-7, analysis 57-13-6, analysis 57-88-5, analysis
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, enzymic photometric, nylon **test strips** for)
IT 83-07-8 9001-37-0 9001-62-1 9001-96-1 9002-13-5 9003-99-0 9028-72-2 9073-63-6 69669-73-4
RL: ANST (Analytical study)
(nylon **test strips** contg., for blood or **urine** photometric **anal.**)

L42 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 1998 ACS
AN 1997:672770 HCAPLUS
DN 127:259761
TI Determination of characteristics of **fluids** by use of a disposable sensor module of a testing device
IN Birch, Brian Jeffrey; Baginski, Edward; Morris, Nicholas Andrew; Lovell, Catherine; **Catt, Michael**; Eddowes, Miles Hugh

PA Unilever Plc, UK
SO Brit. UK Pat. Appl., 17 pp.
CODEN: BAXXDU
PI GB 2310493 A1 970827
AI GB 97-3215 970217
PRAI EP 96-301259 960226
DT Patent
LA English
AB The device comprises two separable parts including a first part having a power supply and processing electronic and a second part comprising a display module and sensing module. The display module may comprise a disposable and irreversible thermochromic strip. The sensing module contains an electrode arrangement in the form of a capillary fill device comprising a pair of spaced apart plates defining a known vol. with electrodes therein. In use, an elec. potential is applied across the electrodes of the CFD resulting in a flow of current through the sample fluid proportional to the electrochem. activity. Electronic means processes the response to produce an elec. signal of magnitude indicative of the characteristic which is recorded on the display.
IC ICM G01N033-48
CC 9-1 (Biochemical Methods)
ST **fluid** disposable sensor module testing device
IT Body **fluid**
Capillary tubes
Electrodes
Fluids
Sensors
(detn. of characteristics of **fluids** by use of a disposable sensor module of a testing device)

L42 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 1998 ACS
AN 1996:290105 HCAPLUS
DN 124:308534
TI Monitoring methods and devices for use therein
IN **Catt, Michael**; Cunningham, Carole Robinson; Mundill, Paul Henry Charles; Prior, Michael Evans; Wilson, Stewart; Zhang, Zhi Gang
PA Unipath Limited, UK
SO Eur. Pat. Appl., 43 pp.
CODEN: EPXXDW
PI EP 703454 A1 960327
DS R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE
AI EP 95-306661 950921
PRAI GB 94-19264 940923
GB 94-19382 940926
GB 95-1863 950131
DT Patent
LA English
AB Methods, devices and test kits for monotirong the ovulation cycle, involve testing the body fluid, e.g. urinary, concn. of one or more analytes. Preferably estrone-3-glucuronide and LH are both measured, and a ref. concn. for E3G is established at about day 6 of the current cycle. Preferably, disposable testing devices are used, in conjunction with a relatively permanent electronic reader/monitor. The no. of "daily" tests required per mo can be minimized.
IC ICM G01N033-76
ICS A61B010-00

CC 2-1 (Mammalian Hormones)
IT Body **fluid**
Urine analysis
(monitoring methods and devices)

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=> d que l45;d his l46

L13       42085 SEA FILE=HCAPLUS ABB=ON  BODY FLUID#/OBI OR URINE/OBI (L)
                ANALYSIS/OBI
L43        5936 SEA FILE=HCAPLUS ABB=ON  MONITOR?/OBI (L) (METHOD#/OBI OR
                DEVICE?/OBI)
L44         111 SEA FILE=HCAPLUS ABB=ON  L43 AND L13
L45           7 SEA FILE=HCAPLUS ABB=ON  L44 AND (ANALYTE#/OBI OR ANALYTE
                #/AB)


     (FILE 'HCAPLUS' ENTERED AT 10:03:28 ON 19 MAR 1998)
L46           2 S L45 NOT (L41 OR L42 OR L40)

=> d .ca l46 1-2


L46  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 1998 ACS
AN   1996:617565  HCAPLUS
DN   125:322167
TI   Analytical reliability of determining osteocalcin, procollagen I
     C-terminal peptide (PICP) and deoxypyridinoline by immunochemical
     methods. Estimate of their possible diagnostic value and
     patient monitoring
AU   Friedecky, B.; Pliskova, L.; Pavlisova, M.; Palicka, V.; Jabor, A.
CS   Ustav klinicke biochemie diagnostiky, Fakultni nemocnice, Hradec
     Kralove, Czech Rep.
SO   Klin. Biochem. Metab. (1996), 4(3), 148-150
     CODEN: KBMEFQ; ISSN: 1210-7921
DT   Journal
LA   Czech
AB   The long-term inaccuracy of detg. osteocalcin by the Metra enzyme
     immunoassay ranged 8.5-12.1% and by the Nichols IRMA it was 7.1%
     (av.). The crit. difference of 2 consecutive measurements for
     monitoring by the Metra is 34.5-45.9% and by the Nichols IRMA 32.0%.
     Imprecision of measuring PICP by Metra ranged 9.5-14.7% and by Orion
     2.0-7.1% only. Imprecision of measuring deoxypyridinoline in urine
     by the Metra kit ranged 8.1-16.3%. By means of total biol.
     variations derived from ref. intervals, we calcd. the anal.
     imprecisions of individual analytes required for their use
     in diagnostic testing. If we assume a zero bias value of
     measurement, then max. required imprecisions are: 18.7% for
     osteocalcin, 16% for PICP, and 13% for deoxypyridinoline.
CC   9-10 (Biochemical Methods)
     Section cross-reference(s): 14
IT   Blood analysis
     Immunoassay
     Urine analysis
        (osteocalcin and procollagen I C-terminal peptide and
        deoxypyridinoline immunoassay reliability for diagnosis and
        monitoring)

L46  ANSWER 2 OF 2  HCAPLUS  COPYRIGHT 1998 ACS
AN   1993:422676  HCAPLUS
DN   119:22676
TI   Disposable assay device for urinary nicotine metablite
     determination for monitoring smoking habits
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IN Cope, Graham Francis; Bunce, Roger; Gibbons, John
PA University of Birmingham, UK
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
PI WO 9309431 A1 930513
DS W: AU, CA, JP, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE
AI WO 92-GB1981 921029
PRAI GB 91-23200 911101
GB 92-14457 920708
DT Patent
LA English
AB A disposable device for colorimetric detn. of nicotine metabolites in urine comprises (1) a reaction chamber contg. an assay reagent sensitive to the **analyte**, (2) a sample collector/dispenser having a sample collecting chamber closed by an elastic membrane and a downwardly projecting sampling and piercing tube to enable a predetd. quantity of sample to be dispensed into the reaction chamber, nondetachably engaged with the body of the device by engagement of a rib on the collector/dispenser with a lip on the body, and (3) a seal to prevent leakage of the contents after use. An assay reagent for anal. of 500 .mu.L urine comprises 2M citric acid/1.5M Na citrate buffer (pH 4.7) 150, 20% KCN 50, 20% chloramine T 50, and 10% thiobarbituric acid 500 .mu.L.
IC ICM G01N033-48
ICS B01L003-00
CC 4-1 (Toxicology)
Section cross-reference(s): 9
IT **Urine analysis**
(nicotine metabolite detn. in, colorimetric, disposable app. for)
IT Spectrochemical **analysis**
(colorimetric, for nicotine metabolite detn. in **urine** with disposable devise)

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(FILE 'WPIDS' ENTERED AT 10:25:46 ON 19 MAR 1998)
DEL HIS Y
ACT PORT9335WP/A

L1 (7) SEA FILE=WPIDS ABB=ON "CATT M"/AU
L2 (11) SEA FILE=WPIDS ABB=ON "PEARSON M"/AU OR "PEARSON M T"/AU
L3 18 SEA FILE=WPIDS ABB=ON L2 OR L1
L4 11298 S KIT#
L5 3667 S ANALYTE#
L6 5 S L3 AND (L4 OR L5)
L7 21117 S (MONITOR? (3A) (DEVICE# OR METHOD#))
L8 17955 S BODY (2W) FLUID# OR URINE
L9 6 S L3 AND L8
L10 6 S L9 OR L6
L11 1333 S L5 (7A) (CONC? OR QUANTITA? OR QUALITAT? OR ANALYSIS OR
L12 210 S L11 AND L8
L13 18 S L4 AND L12
L14 3495 S (TEST OR CARRIER) (3A) STRIP#
L15 19 S L12 AND L14
L16 134 S READER?(4A) MONITOR?
L17 1 S L12 AND L16

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L18       36149 S PROJECT? (3A) (PORTION# OR PART# OR LIP#)
L19           1 S L18 AND L12
L20      240652 S SLOT? OR SNAP ENGAGE? OR SWITCH ACTUAT? OR LOCK (2W) KE
L21           2 S L12 AND L20
L22         323 S ASSAY (3A) DEVICE#
L23       17485 S READ? (3A) DEVICE#
L24          17 S L12 AND (L23 OR L22)

     FILE 'WPIDS' ENTERED AT 10:43:09 ON 19 MAR 1998
L25           8 S L24 AND READ?
L26           9 S L17 OR L19 OR L21 OR L25
L27          34 S L13 OR L15
L28           5 S L27 AND (L18 OR L20 OR L22 OR L23)
L29          11 S L28 OR L26
L30           4 S L10 NOT L29     inventor search

=> d .wp 129 1-11


L29  ANSWER 1 OF 11  WPIDS   COPYRIGHT 1998 DERWENT INFORMATION LTD
AN   97-237837 [22]   WPIDS
DNN  N97-196487       DNC C97-076466
TI   Test kit comprising assay device and
     reader - where correct insertion of assay
     device actuates reader.
DC   B04 D15 J04 S03
PA   (UNIL) UNILEVER NV
CYC  1
PI   DE 29704394 U1 970424 (9722)*      37 pp
ADT  DE 29704394 U1 DE 97-29704394 970311
PRAI EP 96-307089   960927
AB   DE29704394 U   UPAB: 970530
     Test kit for qualitative or quantitative
     determination of one or more analytes in a liquid sample
     comprises an assay device and a reading
     device, where the assay device has to be
     precisely positioned in the reading device in
     order to obtain an accurate reading. Precise positioning
     of the assay device in the reading
     device creates a ''lock and key
     interaction'' between the assay device and a
     component of the reading device that initiates
     the reading process.
          USE - Used especially for monitoring urine analytes
     at home to determine ovulation status, but also for other assays,
     e.g. for tumour markers, myocardial infarct markers, drugs of abuse,
     hormones or infectious disease markers, for monitoring therapeutic
     drug levels, or for quality control of raw materials, waste water or
     environmental samples.
          ADVANTAGE - The object is to improve the positioning mechanisms
     described in WO 9513531.
     Dwg.8/10

L29  ANSWER 2 OF 11  WPIDS   COPYRIGHT 1998 DERWENT INFORMATION LTD
AN   96-161770 [17]   WPIDS
DNN  N96-135478       DNC C96-051272
TI   Test kit for monitoring ovulation cycle - comprising
     several disposable immunoassay devices and a
     reader-monitor.
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DC B04 J04 P31 S03 S05
IN CATT, M; CUNNINGHAM, C R; MUNDILL, P H C; PRIOR, M E; WILSON, S J; ZHANG, Z G; WILSON, S; ZHANG, S G
PA (UNIL) UNIPATH LTD; (UNIP-N) UNIPATH LTD
CYC 67
PI EP 703454 A1 960327 (9617)* EN 43 pp
R: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE
WO 9609553 A1 960328 (9619) EN 101 pp
RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG
W: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IS JP KE KG KP KR KZ LK LR LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TT UA UG US UZ VN
FR 2725024 A1 960329 (9620) 107 pp
AU 9536522 A 960409 (9629)
ZA 9508032 A 970528 (9727) 100 pp
CZ 9700896 A3 971015 (9748)
BR 9509029 A 971028 (9750)
ES 2109199 A1 980101 (9809)
ADT EP 703454 A1 EP 95-306661 950921; WO 9609553 A1 WO 95-EP3747 950922; FR 2725024 A1 FR 95-11154 950922; AU 9536522 A AU 95-36522 950922; ZA 9508032 A ZA 95-8032 950922; CZ 9700896 A3 WO 95-EP3747 950922, CZ 97-896 950922; BR 9509029 A BR 95-9029 950922, WO 95-EP3747 950922; ES 2109199 A1 ES 96-1439 950922
FDT AU 9536522 A Based on WO 9609553; CZ 9700896 A3 Based on WO 9609553; BR 9509029 A Based on WO 9609553
PRAI GB 95-1863 950131; GB 94-19264 940923; GB 94-19382 940926
AB EP 703454 A UPAB: 971021

Test **kit** for monitoring the ovulation cycle of a female mammal (esp. a woman) comprises at least 7 disposable testing devices for sampling and testing a **body fluid**, eg. **urine**, and an electronic **reader/monitor** for **reading** and interpreting signals provided by the testing devices when they are inserted into a receiver in the **reader/monitor**. The signals are created by concentrating a first detectable material (pref. a particle-labelled reagent) in a first detection zone of a porous **carrier** (eg. **test strip**) and by concentrating a second detectable material (pref. a particle labelled reagent) in a second detection zone of the carrier while the sampled **body fluid** is flowing (eg. by capillarity) through the carrier, where the second detection zone is pref. downstream from the first relative to a receiving portion of the testing device which is contacted with the **body fluid** to initiate the test. The signal provided by the first detection zone is indicative of the **concn**. of a first **analyte** (pref. LH) which exhibits a significant **concn**. change closely associated with the time of actual ovulation. The signal provided by the second detection zone is indicative of the **concn**. of a second **analyte** (pref. oestradiol or one of its metabolites, e.g. oestrone 3-glucuronide) which exhibits a significant concn. change in advance of the onset of the fertile phase of the ovulation cycle. Also claimed is an **assay device** for determn. of two or more analytes in a single liq. sample, where at least 1 analyte (A1) is determinable by a sandwich binding reaction and at least 1 other (A2) is a hapten not **readily** determinable by a sandwich binding reaction.

USE - The **kit** is used in a monitoring procedure in

which: (1) testing is performed at least once between days 1 and 7 from the onset of menses to establish a reference signal for the second analyte; (2) testing is temporarily ceased; (3) testing is performed at least once, pref. daily, during a period at least 5 days before the mean numerical day on which ovulation has occurred in one or more previous ovulation cycles, and (4) the signals for the second analyte obtd. during phase (3) are compared with the reference signal to determine if a concn. change indicative of imminent ovulation is occurring or has occurred since the previous test. This procedure is esp. intended to be an aid to contraception.

ADVANTAGE - The number of daily tests per month can be minimised.

Dwg.9/9

L29 ANSWER 3 OF 11 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 95-194212 [25] WPIDS
DNN N95-152412 DNC C95-089904
TI Oestradiol and metabolite excretion assay with improved reliability - from ratio with androgen and metabolites excreted, is independent of **urine** vol, use in fertility control, promotion and contraception.
DC B01 B04 S03
IN COLLINS, W P
PA (UNIL) UNIPATH LTD; (UNIL) UNIPATH LTD
CYC 60
PI WO 9513543 A1 950518 (9525)* EN 25 pp
RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ
W: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA US UZ VN
AU 9481415 A 950529 (9537)
EP 728310 A1 960828 (9639) EN
R: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE
JP 09504874 W 970513 (9729) 31 pp
AU 679133 B 970619 (9733)
ADT WO 9513543 A1 WO 94-EP3702 941108; AU 9481415 A AU 94-81415 941108; EP 728310 A1 WO 94-EP3702 941108, EP 95-900689 941108; JP 09504874 W WO 94-EP3702 941108, JP 95-513596 941108; AU 679133 B AU 94-81415 941108
FDT AU 9481415 A Based on WO 9513543; EP 728310 A1 Based on WO 9513543; JP 09504874 W Based on WO 9513543; AU 679133 B Previous Publ. AU 9481415, Based on WO 9513543
PRAI EP 93-309056 931112
AB WO 9513543 A UPAB: 971021
The following are claimed: (1) a method for determining the **concn**. of an **analyte** in a **urine** sample, less dependent on variability in biological vol. in original sample source, comprising assaying the concn. of an androgen, or a metabolite of it, in the sample and comparing the two concn. values; (2) a method of providing awareness of the status of the ovulation cycle of an individual human female subject, involving the detection of the rise in urinary E3G concn. indicative of imminent ovulation, where the urinary concn. of an androgen or a metabolite thereof, esp. T17G, in the same subject is measured and used to render the E3G concn. data less dependent on biological vol. variability; (3) as **assay device** for determining the concn. of oestradiol or a metabolite thereof, esp. E3G, in a **urine** sample, which also enables the concn. of an androgen or a metabolite

thereof, esp. T17G, in the same **urine** sample to be determined; and (4) an electronic device or monitor programmed for use in one of the preceding claims. a test **kit** comprising an electronic device or monitor comprising an electronic device or monitor according to claim (4), together with at least 1 **assay devices** according to claim (3).

USE - The method is used for measuring the excretion of female hormones, oestradiol and its metabolites, including primarily oestrone-3-glucuronide (E3G), but also oestradiol-3- and -17 beta -glucoronide, oestriol-3- and -16- alpha glucuronide, and, for non-human subjects, oestrone-3-sulphate and oestradiol-17 beta -sulphate. A rise in the level of these hormones indicates imminent ovulation, and is used either in promotion or redn. of the likelihood of conception.

ADVANTAGE - The assay must be performed accurately over a period of several days to identify the hormone conc. rise. Errors from variation of fluid intake or kidney function, which affect ordinary concn. measurements, are avoided. The androgen is present at similar concn. to the oestrogen, not grossly different, as creatinine, a known comparison standard, necessitating dilution. Both assays can therefore be performed on the same sample, and the ratio determined directly without **urine** vol. corrections. The assay can be as a **test kit** contg. **strips** or sticks giving colours to compare with a chart, for use in the home, or using programmed electronic devices or monitors to measure the ratio, e.g, from fluorescence.

Dwg.4/5

L29 ANSWER 4 OF 11 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 95-180822 [24] WPIDS
DNC C95-083730
TI Portable analytical device for testing fluids, e.g. **urine** - has assay strip held at window in hollow casing with absorbent material to collect sample and movable cover for window.
DC B04 J04
IN SENIOR, S J
PA (UNIL) UNIPATH LTD; (UNIP-N) UNIPATH LTD
CYC 61
PI EP 653639 A1 950517 (9524)* EN 8 pp
R: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE
FR 2712392 A3 950519 (9525) 17 pp
WO 9513541 A1 950518 (9525) EN 13 pp
RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ
W: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN
AU 9479941 A 950529 (9537)
US 5504013 A 960402 (9619) 6 pp
ZA 9408783 A 960731 (9635) 17 pp
CZ 9601319 A3 960911 (9643)
NZ 274853 A 961029 (9648)
BR 9408040 A 961224 (9706)
JP 09504871 W 970513 (9729) 18 pp
CN 1134751 A 961030 (9803)
HU 76427 T 970828 (9811)
ADT EP 653639 A1 EP 93-309055 931112; FR 2712392 A3 FR 94-13545 941110; WO 9513541 A1 WO 94-EP3598 941031; AU 9479941 A AU 94-79941 941031; US 5504013 A US 94-338150 941109; ZA 9408783 A ZA 94-8783 941107; CZ

9601319 A3 CZ 96-1319 941031; NZ 274853 A NZ 94-274853 941031, WO 94-EP3598 941031; BR 9408040 A BR 94-8040 941031, WO 94-EP3598 941031; JP 09504871 W WO 94-EP3598 941031, JP 95-513567 941031; CN 1134751 A CN 94-194107 941031; HU 76427 T WO 94-EP3598 941031, HU 96-939 941031

FDT AU 9479941 A Based on WO 9513541; NZ 274853 A Based on WO 9513541; BR 9408040 A Based on WO 9513541; JP 09504871 W Based on WO 9513541; HU 76427 T Based on WO 9513541

PRAI EP 93-309055 931112

AB EP 653639 A UPAB: 971021

An analytical device for testing the presence and/or **concn** . of an **analyte** in a sample liquid has a hollow casing (10). A sample receiving member (16) extends from one end of the casing and is connected to a bibulous strip which transports the sample into the casing. At the opposite end of the casing is a window (17) for observing a reaction indicating presence of the analyte.

A cover (15) is selectively engageable with the ends of the casing. In one position it covers the sample receiving member and in the other covers the window.

USE - The device may be used in pregnancy tests and ovulation prediction tests.

ADVANTAGE - The device is small yet has improved speed and accuracy.

Dwg.1/4

L29 ANSWER 5 OF 11 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD

AN 95-106932 [14] WPIDS

DNN N95-084550

TI Electronic **assay device** for detecting analytes in **body fluid**, e.g. blood or **urine** - combines miniaturised electronics and chemistry reagents to **measure analytes** of clinical interest in credit card size housing.

DC S03 S05

IN ALLEN, M P

PA (METR-N) METRIKA LAB INC

CYC 57

PI WO 9506240 A1 950302 (9514)* EN 59 pp
RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE
W: AM AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB GE HU JP KE KG KP KR KZ LK LT LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN
AU 9475632 A 950321 (9526)
EP 722563 A1 960724 (9634) EN 59 pp
R: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE
US 5580794 A 961203 (9703) 27 pp
JP 09503581 W 970408 (9724) 55 pp

ADT WO 9506240 A1 WO 94-US9135 940822; AU 9475632 A AU 94-75632 940822; EP 722563 A1 EP 94-925850 940822, WO 94-US9135 940822; US 5580794 A Cont of US 93-111347 930824, US 95-455236 950531; JP 09503581 W WO 94-US9135 940822, JP 95-507631 940822

FDT AU 9475632 A Based on WO 9506240; EP 722563 A1 Based on WO 9506240; JP 09503581 W Based on WO 9506240

PRAI US 93-111347 930824; US 95-455236 950531

AB WO 9506240 A UPAB: 950412

A disposable **assay device** comprises a card-like housing (8) containing a sample receptor for receiving a sample of **body fluid** containing an analyte to be determined.

A sample treatment reagent strip (10) reacts with the sample fluid components to yield a physically detectable change for producing an electrical signal which correlates with the amount of analyte in the sample.

A signal processor (32) is connected to a detector (20,22) for converting the electrical signal to a digital test result output. A display (6) is connected to the signal processor for receiving the result output and presenting it as a visual **reading**.

USE/ADVANTAGE - Analysing blood or **urine**. Credit card sized, entirely self-contained state-of-the-art **assay device** which is inexpensive enough to discard or recycle. Dwg.2/21

L29 ANSWER 6 OF 11 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 95-060772 [08] WPIDS
DNN N95-048372 DNC C95-026984
TI Monitoring fertility status of individual females - by testing **body fluid analyte concns**. at specific times during the ovulation cycle.
DC B04 P31 S03
IN CARTER, M; MONDEL, P H C; ZHANG, Z G; CATT, M; MUNDILL, P H C
PA (UNIL) UNIPATH CO LTD; (UNIL) UNIPATH LTD
CYC 56
PI WO 9501128 A1 950112 (9508)* EN 52 pp
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE
W: AM AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB GE HU JP KE KG KP KR KZ LK LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN
AU 9472278 A 950124 (9520)
ZA 9404677 A 960228 (9614) 50 pp
EP 706346 A1 960417 (9620) EN
R: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE
CZ 9600005 A3 960612 (9631)
BR 9406943 A 960806 (9637)
JP 08512132 W 961217 (9710) 53 pp
HU 74629 T 970128 (9746)
NZ 268889 A 971024 (9749)
CN 1129898 A 960828 (9751)
ADT WO 9501128 A1 WO 94-EP2068 940624; AU 9472278 A AU 94-72278 940624; ZA 9404677 A ZA 94-4677 940629; EP 706346 A1 EP 94-921625 940624, WO 94-EP2068 940624; CZ 9600005 A3 CZ 96-5 940624; BR 9406943 A BR 94-6943 940624, WO 94-EP2068 940624; JP 08512132 W WO 94-EP2068 940624, JP 95-503253 940624; HU 74629 T WO 94-EP2068 940624, HU 95-3923 940624; NZ 268889 A NZ 94-268889 940624, WO 94-EP2068 940624; CN 1129898 A CN 94-193200 940624
FDT AU 9472278 A Based on WO 9501128; EP 706346 A1 Based on WO 9501128; BR 9406943 A Based on WO 9501128; JP 08512132 W Based on WO 9501128; HU 74629 T Based on WO 9501128; NZ 268889 A Based on WO 9501128
PRAI EP 93-305220 930702
AB WO 9501128 A UPAB: 970606
The following are claimed: (A) a method for monitoring the fertility status of an individual female mammalian subject, involving testing of the **body fluid concn**. of an **analyte**, esp. oestradiol or its metabolite, in which testing is conducted at least once during the interval spanning days 1 to 7 inclusive of the current cycle, to establish a reference concn. value or signal for the current cycle, and the testing is also conducted later in the current cycle and the concn. value or signal compared to the reference value or signal; (B) a **kit**

L29 ANSWER 9 OF 11 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 92-026069 [04] WPIDS
DNC C92-011208
TI Conductive sensor contg. conductive polymer, for diagnostic assays - gives rapid results with small sample, used e.g. for glycaemia control by diabetics.
DC A89 B04 D16 J04
IN MUSHO, M K; NOELL, J O; TSE, P H; TSE, P H S
PA (MILE) MILES INC; (FARB) BAYER CORP; (MILE) MILES LAB INC
CYC 17
PI EP 467219 A 920122 (9204)*
R: AT BE CH DE ES FR GB GR IT LI LU NL SE
AU 9180299 A 920123 (9214)
CA 2043807 A 920120 (9215)
US 5202261 A 930413 (9317) 32 pp
AU 635432 B 930318 (9318)
US 5250439 A 931005 (9341) 32 pp
EP 467219 A3 930519 (9403)
JP 06022793 A 940201 (9409) 35 pp
ADT EP 467219 A EP 91-111538 910711; US 5202261 A Cont of US 90-554393 900719, US 91-793180 911118; AU 635432 B AU 91-80299 910709; US 5250439 A Div ex US 91-793180 911118, US 92-990340 921214; EP 467219 A3 EP 91-111538 910711; JP 06022793 A JP 91-202286 910718
FDT AU 635432 B Previous Publ. AU 9180299; US 5250439 A Div ex US 5202261
PRAI US 90-554393 900719; US 91-793180 911118; US 92-990340 921214

for use in the method comprising disposable **body fluid** testing devices together with a **device** for **reading** and interpreting the results of the tests performed using the testing devices, and(C) a human contraception method.

USE - The methods are used to monitor the fertility status, partic. as an aid to contraception or to enhance the likelihood of conception.

ADVANTAGE - Using the methods, effective monitoring of the ovulation cycle can be achieved using data derived solely from the **measurement** of **body fluid analyte concns**. without the necessity for regular, e.g. daily, testing throughout the cycle.

Dwg.0/3

AB EP 467219 A UPAB: 950921
A conductive sensor for assaying a test sample for the presence or **concn**. of a predetermined **analyte**, which is capable of interacting with an oxidase enzyme, comprises: (a) a layer of a host matrix permeable to the analyte; (b) a layer of a conducting polymer in contact with (a); and (c) a means for measuring a change in conductivity of (b), connected to it. Layer (a) has, incorporated homogeneously, (i) an oxidase enzyme capable of interacting with the analyte; (ii) a cpd. having peroxidase activity; (iii) a dopant cpd. precursor; and the analyte interacts with (i), (ii), and (iii) to generate a dopant cpd. The dopant then migrates to and dopes layer (b).

USE/ADVANTAGE - The **device** is economical, miniaturised, **readily** manufactured (including the microelectrode assembly), and more stable than prior art due to the nature of the polymer. The amt. of sample required is smaller (1 micro l can be assayed) against 5-20 micro l in previous devices, improving patient compliance, and the oxygen limitation problem frequently observed in oxidase sensors has been solved. Results are obtained rapidly, in 5-10 secs., more quickly than present devices, by change of conductivity.- The device is used for analysis of clinically significant materials in biological fluids e.g. **urine** and blood (including plasma and serum), but may also be used for non-biological fluids, e.g. swimming pool water, or wines. A partic. use is for home blood glucose monitoring, to enable better glycaemic control by diabetic individuals. For this purpose, the peroxidase enzyme may be replaced by a molybdenum (VI) catalyst, and the change in conductivity related to the concn. of glucose as a **readout**. @(38pp Dwg.No.0/12
0/12

L29 ANSWER 10 OF 11 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 88-051552 [08] WPIDS
CR 90-000023 [01]; 92-073742 [10]; 92-116149 [15]; 95-201974 [27]; 98-055154 [06]
DNN N88-039118 DNC C88-022831
TI Determn. of analyte(s) in liq. - by taking reflectance **reading** from surface of matrix impregnated with reagent which interacts with analyte.
DC A89 A96 B04 D16 S03 S05
IN JURIK, F; MCGARRAUGH, G; PHILLIPS, R; UNDERWOOD, R
PA (LIFE-N) LIFESCAN INC
CYC 22
PI EP 256806 A 880224 (8808)* EN 50 pp
R: AT BE CH DE ES FR GB GR IT LI LU NL SE
AU 8776758 A 880218 (8815)
NO 8703372 A 880307 (8815)
FI 8703356 A 880214 (8818)
DK 8704191 A 880214 (8819)
JP 63101757 A 880506 (8824)
CN 87106256 A 880323 (8919)
US 4935346 A 900619 (9027)
US 5049487 A 910917 (9140)
US 5059394 A 911022 (9145)
CN 1050930 A 910424 (9203)
CA 1301604 C 920526 (9227)
NO 9203399 A 880215 (9301)
DK 9201571 A 921229 (9316)
DK 9201570 A 921229 (9318)

NO 9302316 A 880215 (9339)
EP 256806 B1 931020 (9342) EN 24 pp
R: AT BE CH DE ES FR GB GR IT LI LU NL SE
DE 3787851 G 931125 (9348)
DK 167621 B 931129 (9402)
ES 2046985 T3 940216 (9411)
FI 9402818 A 940614 (9431)
DK 9400915 A 940805 (9437)
FI 93149 B 941115 (9445)
JP 07067698 A 950314 (9519) 19 pp
FI 9501491 A 950329 (9525)
IE 64442 B 950809 (9539)
FI 95749 B 951130 (9601)
JP 08020364 B2 960304 (9614) 18 pp
JP 2589053 B2 970312 (9715) 20 pp
NO 180762 B 970303 (9716)
CN 1116307 A 960207 (9741)
EP 256806 B2 980121 (9808) EN 21 pp
R: AT BE CH DE ES FR GB GR IT LI LU NL SE

ADT EP 256806 A EP 87-307014 870807; JP 63101757 A JP 87-200079 870812; US 4935346 A US 86-896418 860813; US 5049487 A US 88-154983 880211; US 5059394 A US 88-154941 880211; CA 1301604 C CA 87-544381 870812; NO 9203399 A Div ex NO 87-3372 870812, NO 92-3399 920831; DK 9201571 A Div ex DK 87-4191 870812, DK 92-1571 921229; DK 9201570 A Div ex DK 87-4191 870812, DK 92-1570 921229; NO 9302316 A Div ex NO 87-3372 870812, NO 93-2316 930623; EP 256806 B1 EP 87-307014 870807; DE 3787851 G DE 87-3787851 870807, EP 87-307014 870807; DK 167621 B DK 87-4191 870812; ES 2046985 T3 EP 87-307014 870807; FI 9402818 A Div ex FI 87-3356 870803, FI 94-2818 940614; DK 9400915 A Div ex DK 92-1570 921229, DK 94-915 940805; FI 93149 B FI 87-3356 870803; JP 07067698 A Div ex JP 87-200079 870812, JP 94-158969 870812; FI 9501491 A Div ex FI 94-2818 940614, FI 95-1491 950329; IE 64442 B IE 87-2162 870812; FI 95749 B Div ex FI 87-3356 870803, FI 94-2818 940614; JP 08020364 B2 JP 87-200079 870812; JP 2589053 B2 Div ex JP 87-200079 870812, JP 94-158969 870812; NO 180762 B NO 87-3372 870812; CN 1116307 A Div ex CN 90-108896 870813, CN 95-100665 870813; EP 256806 B2 EP 87-307014 870807, Related to EP 91-203031 870807, Related to EP 91-203032 870807

FDT DE 3787851 G Based on EP 256806; DK 167621 B Previous Publ. DK 8704191; ES 2046985 T3 Based on EP 256806; FI 93149 B Previous Publ. FI 8703356; FI 95749 B Previous Publ. FI 9402818; JP 08020364 B2 Based on JP 63101757; JP 2589053 B2 Previous Publ. JP 07067698; NO 180762 B Previous Publ. NO 8703372; EP 256806 B2 Related to EP 473241, Related to EP 479394

PRAI US 86-896418 860813; US 88-154983 880211; US 88-154941 880211

AB EP 256806 A UPAB: 980209

A method of determining **analyte concn.** in a liquid comprises (a) **quantitatively measuring** base reflectance from a first surface of a reagent element comprising an inert porous matrix and a reagent system capable of interacting with the analyte to produce a light-absorbing reaction prod., the reagent system being impregnated in the pores of the matrix, prior to application of the liq.; (b) quantitatively measuring reaction reflectance from the reagent element after application of the liquid to a second surface of the reagent element other than the first surface from which the reaction reflectance is measured and after the liquid has migrated through the reagent element from the second surface to the first surface, (c) quantitatively measuring interference reflectance from the first

surface of the reagent element after the application of the liquid using a wavelength of light different from the wavelength of light used to measure the reaction reflectance and (d) calculating a value expressing the concn. from the reflectance measurements. Pref. the matrix has surfaces formed from a polyamide.

USE/ADVANTAGE - The method is esp. used for detn. of glucose in whole blood. The matrix filters out large particles such as red blood cells and the signal producing system produces a prod. which changes the reflectance of the matrix which can be related to the presence of the analyte.

Dwg./3

L29 ANSWER 11 OF 11 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 81-51449D [28] WPIDS
TI **Device** for simultaneous **assay** of two analytical element(s) - esp. bilirubin and cholesterol, in **urine**, plasma etc..
DC B04 S03 S05
IN DAPPEN, G M; WU, T W
PA (EAST) EASTMAN KODAK CO
CYC 1
PI US 4274832 A 810623 (8128)*
PRAI US 79-11606 790212
AB US 4274832 A UPAB: 930915

Device for analysing liq. is a dry, permeable matrix at least partly consisting of two interactive compsns. (A) in liq. contact during use. The first (A) generates a radiometrically-detectable species and the second (A) inhibits or destroys a second radiometrically detectable species, both these reactions corresp. to the presence and/or **concn**. of different **analytes**. The two species are detectable by fluorescence or absorption peaks; pref. above 300nm and sepd. by at least 5nm.

Particularly the first (A) will detect bilirubin (BR); an oxidase-enzyme substrate; an ammonia-producing enzyme substrate or chloride; and the second (A) will pref. detect cholesterol; ammonia-producing enzyme substrate, or bilirubin.

Two **analytes** can be **measured** in blood, serum, **urine** etc. simultaneously by the simple 'dip-and-**read' devices**. Spectral interferences are minimised and sensitivity is good even when **concn**. of one **analyte** is abnormally low and the other elevated.

=> d l30 .wp 1-4

L30 ANSWER 1 OF 4 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 95-180811 [24] WPIDS
DNN N95-141930
TI Reading method for assay results suitable for home use, especially for testing **body fluids** - detects electromagnetic radiation emerging from rear of strip of carrier in which detectable material is concentrated and exposed to uniform intensity radiation.
DC S03
IN **CATT, M**; MUNDILL, P H C; PRIOR, M E
PA (UNIL) UNIPATH LTD; (UNIP-N) UNIPATH LTD
CYC 61
PI EP 653625 A1 950517 (9524)* EN 20 pp
R: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE

FR 2712391 A1 950519 (9525) 51 pp
WO 9513531 A1 950518 (9525) EN 43 pp
RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ
W: AM AT AU BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU JP KE KG KP KR KZ LK LR LT LU LV MD MG MN MW NL NO NZ PL PT RO RU SD SE SI SK TJ TT UA UZ VN
AU 9481068 A 950529 (9537)
TW 266262 A 951221 (9610)
ZA 9408782 A 960731 (9635) 45 pp
BR 9408036 A 961224 (9706)
NZ 275815 A 961220 (9708)
JP 09504872 W 970513 (9729) 50 pp
CN 1134750 A 961030 (9803)
HU 75277 T 970528 (9803)

ADT EP 653625 A1 EP 94-308174 941107; FR 2712391 A1 FR 94-13541 941110; WO 9513531 A1 WO 94-EP3700 941108; AU 9481068 A AU 94-81068 941108; TW 266262 A TW 94-110854 941122; ZA 9408782 A ZA 94-8782 941107; BR 9408036 A BR 94-8036 941108, WO 94-EP3700 941108; NZ 275815 A NZ 94-275815 941108, WO 94-EP3700 941108; JP 09504872 W WO 94-EP3700 941108, JP 95-513594 941108; CN 1134750 A CN 94-194106 941108; HU 75277 T WO 94-EP3700 941108, HU 96-1239 941108

FDT AU 9481068 A Based on WO 9513531; BR 9408036 A Based on WO 9513531; NZ 275815 A Based on WO 9513531; JP 09504872 W Based on WO 9513531; HU 75277 T Based on WO 9513531

PRAI EP 93-309053 931112

AB EP 653625 A UPAB: 971021

The method of reading the result of an assay effected by concentrating a detectable material in a comparatively small zone of a carrier in the form of a strip, sheet or layer through which electromagnetic radiation, such as visible light, is transmissible. A portion of one face of the carrier is exposed to incident radiation which is of substantially uniform intensity across the portion. Electromagnetic radiation emerging from the opposite face is measured to determine the assay result.

The monitor comprises an oval moulded case (400) with a recess (401) towards the right hand side and a backward sloping rear face (402) which includes an aperture (403) for a pushbutton, a window (404) to reveal a display panel. Two further windows (405,406) reveal coloured lights to convey information to the user. A long slot (407) in the recess provides access to the reading head.

ADVANTAGE - Combines convenient sample testing with simple and cost-effective numerical determination of the assay result.

Dwg.4a/8

L30 ANSWER 2 OF 4 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 94-083365 [10] WPIDS
DNN N94-065086 DNC C94-038247
TI Monitoring ovulation cycles - by testing for **analyte** **body fluid** concn., using testing dates and threshold values based on previous cycles.
DC B04 P31 S03
IN **CATT, M**; COLEY, J; DAVIS, P J
PA (UNIL) UNIPATH LTD; (UNIL) UNILEVER NV; (UNIL) UNILEVER PATENT HOLDINGS BV; (UNIL) UNILEVER PLC; (UNIL) UNILEVER PLC
CYC 45
PI WO 9404926 A1 940303 (9410)* 58 pp
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE
W: AT AU BB BG BR BY CA CH CZ DE DK ES FI GB HU JP KP KR KZ LK

LU MG MN MW NL NO NZ PL PT RO RU SD SE SK UA US VN
AU 9347094 A 940315 (9428)
FI 9500759 A 950306 (9522)
NO 9500636 A 950420 (9525)
EP 656120 A1 950607 (9527) EN
R: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE
US 5467778 A 951121 (9601) 15 pp
JP 08500671 W 960123 (9642) 50 pp
EP 754949 A1 970122 (9709) EN 30 pp
R: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE
EP 656120 B1 970212 (9712) EN 30 pp
R: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE
DE 69308147 E 970327 (9718)
NZ 254823 A 970424 (9723)
ES 2100556 T3 970616 (9731)

ADT WO 9404926 A1 WO 93-EP2148 930810; AU 9347094 A AU 93-47094 930810; FI 9500759 A WO 93-EP2148 930810, FI 95-759 950220; NO 9500636 A WO 93-EP2148 930810, NO 95-636 950220; EP 656120 A1 EP 93-917785 930810, WO 93-EP2148 930810; US 5467778 A US 93-109503 930820; JP 08500671 W WO 93-EP2148 930810, JP 94-505870 930810; EP 754949 A1 Div ex EP 93-917785 930810, EP 96-112233 930810; EP 656120 B1 EP 93-917785 930810, WO 93-EP2148 930810; DE 69308147 E DE 93-608147 930810, EP 93-917785 930810, WO 93-EP2148 930810; NZ 254823 A NZ 93-254823 930810, WO 93-EP2148 930810; ES 2100556 T3 EP 93-917785 930810

FDT AU 9347094 A Based on WO 9404926; EP 656120 A1 Based on WO 9404926; JP 08500671 W Based on WO 9404926; EP 656120 B1 Based on WO 9404926; DE 69308147 E Based on EP 656120, Based on WO 9404926; NZ 254823 A Based on WO 9404926; ES 2100556 T3 Based on EP 656120

PRAI GB 92-17864 920821

AB WO 9404926 A UPAB: 971021

A method is claimed for monitoring the status of a current ovulation cycle of an individual mammalian female subject, involving repeated testing of the **body fluid** concn. of at least one **analyte** of significance in relation to the status of the ovulation cycle during at least the pre-ovulation phase of the current ovulation cycle of the individual subject, in which (a) testing for the **analyte** concn. during the current ovulation cycle is commenced days following the onset of menses but at least 2 numerical days in advance of the earliest numerical day on which actual ovulation has occurred in one or more previous ovulation cycles in the same individual subject and (b) an **analyte** concn. change indicative of imminent ovulation is identified from the results of such testing by reference to an **analyte** concn. reference value that has been adapted to the individual subject on the basis of **analyte** concn. test data obtd. from the subject during one or more previous ovulation cycles.

The **analyte** may be e.g. estradiol, estrone-3-glucuronide (E3G), luteinising hormone (LH) or pregnanediol-3-glucuronide (P3G).

ADVANTAGE - The method allows the determn. with a high degree of accuracy of an ovulation day and hence a fertile phase within a cycle as an aid to contraception.

Dwg.3/3

L30 ANSWER 3 OF 4 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 94-083364 [10] WPIDS
DNN N94-065085 DNC C94-038246

TI Test **kit** for ovulation cycles for ovulation date - tests for **analyte body fluid** concn. and uses threshold values based on previous cycles.

DC B04 P31 S03

IN **CATT, M**; COLEY, J; DAVIS, P J

PA (UNIL) UNIPATH LTD; (UNIL) UNILEVER NV; (UNIL) UNILEVER PLC

CYC 45

PI WO 9404925 A1 940303 (9410)* 48 pp
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE
W: AT AU BB BG BR BY CA CH CZ DE DK ES FI GB HU JP KP KR KZ LK LU MG MN MW NL NO NZ PL PT RO RU SD SE SK UA US VN
AU 9347093 A 940315 (9428)
FI 9500760 A 950220 (9520)
NO 9500637 A 950420 (9525)
EP 656119 A1 950607 (9527) EN
R: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE
JP 08500670 W 960123 (9642) 43 pp
EP 754950 A1 970122 (9709) EN 27 pp
R: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE
EP 656119 B1 970312 (9715) EN
R: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE
DE 69308858 E 970417 (9721)
NZ 254822 A 970424 (9723)
ES 2099965 T3 970601 (9729)

ADT WO 9404925 A1 WO 93-EP2147 930810; AU 9347093 A AU 93-47093 930810; FI 9500760 A WO 93-EP2147 930810, FI 95-760 950220; NO 9500637 A WO 93-EP2147 930810, NO 95-637 950220; EP 656119 A1 EP 93-917784 930810, WO 93-EP2147 930810; JP 08500670 W WO 93-EP2147 930810, JP 94-505869 930810; EP 754950 A1 Div ex EP 93-917784 930810, EP 96-112235 930810; EP 656119 B1 EP 93-917784 930810, WO 93-EP2147 930810; DE 69308858 E DE 93-608858 930810, EP 93-917784 930810, WO 93-EP2147 930810; NZ 254822 A NZ 93-254822 930810, WO 93-EP2147 930810; ES 2099965 T3 EP 93-917784 930810

FDT AU 9347093 A Based on WO 9404925; EP 656119 A1 Based on WO 9404925; JP 08500670 W Based on WO 9404925; EP 656119 B1 Based on WO 9404925; DE 69308858 E Based on EP 656119, Based on WO 9404925; NZ 254822 A Based on WO 9404925; ES 2099965 T3 Based on EP 656119

PRAI GB 92-17865 920821

AB WO 9404925 A UPAB: 970606

A test **kit**, providing awareness of the status of a current mammalian ovulation cycle, comprises one or more testing devices for determining the concn. (in relative or absolute terms) in a **body fluid** of an **analyte** of significance in relation to the status of the ovulation cycle, together with an electronic device programmed to process **analyte** concn. tests data obtd. during at least part of the pre-ovulation phase of the current cycle and to identify an **analyte** concn. change indicative of imminent ovulation, relative to an **analyte** concn. reference value that is adapted to an individual subject on the basis of **analyte** concn. test data obtd. from the subject during one or more previous ovulation cycles.

The **analyte** may be e.g. oestradiol, oestrone-3-glucuronide (E34), luteinising hormone (LH) or pregnanediol-3-glucuronide (P3G).

ADVANTAGE - The method allows the determn. with a high deg. of accuracy of an ovulation day and hence a fertile period within a cycle as an aid to contraception.

Dwg.3/3

L30 ANSWER 4 OF 4 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 94-083363 [10] WPIDS
DNN N94-065084 DNC C94-038245
TI Monitoring status of ovulation cycle, partic. as aid to contraception - by measuring e.g. oestradiol in **urine** for several days before anticipated day of ovulation.
DC B04 P31 S03
IN **CATT, M**; COLEY, J; DAVIS, P J
PA (UNIL) UNIPATH LTD; (UNIL) UNILEVER NV; (UNIL) UNILEVER PLC; (UNIL) UNILEVER PLC
CYC 45
PI WO 9404924 A1 940303 (9410)* 38 pp
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA PT SE
W: AT AU BB BG BR BY CA CH CZ DE DK ES FI GB HU JP KP KR KZ LK LU MG MN MW NL NO NZ PL PT RO RU SD SE SK UA US VN
AU 9347092 A 940315 (9428)
FI 9500717 A 950217 (9520)
NO 9500635 A 950420 (9525)
EP 656118 A1 950607 (9527) EN
R: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE
JP 08500669 W 960123 (9642) 34 pp
EP 745853 A1 961204 (9702) EN 23 pp
R: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE
EP 656118 B1 970212 (9712) EN 21 pp
R: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE
DE 69308146 E 970327 (9718)
NZ 254821 A 970424 (9723)
ES 2100555 T3 970616 (9731)
ADT WO 9404924 A1 WO 93-EP2146 930810; AU 9347092 A AU 93-47092 930810; FI 9500717 A WO 93-EP2146 930810, FI 95-717 950217; NO 9500635 A WO 93-EP2146 930810, NO 95-635 950220; EP 656118 A1 EP 93-917783 930810, WO 93-EP2146 930810; JP 08500669 W WO 93-EP2146 930810, JP 94-505868 930810; EP 745853 A1 Div ex EP 93-917783 930810, EP 96-112234 930810; EP 656118 B1 EP 93-917783 930810, WO 93-EP2146 930810; DE 69308146 E DE 93-608146 930810, EP 93-917783 930810, WO 93-EP2146 930810; NZ 254821 A NZ 93-254821 930810, WO 93-EP2146 930810; ES 2100555 T3 EP 93-917783 930810
FDT AU 9347092 A Based on WO 9404924; EP 656118 A1 Based on WO 9404924; JP 08500669 W Based on WO 9404924; EP 656118 B1 Based on WO 9404924; DE 69308146 E Based on EP 656118, Based on WO 9404924; NZ 254821 A Based on WO 9404924; ES 2100555 T3 Based on EP 656118
PRAI GB 92-17866 920821
AB WO 9404924 A UPAB: 971021
The status of a current ovulation cycle in a mammal is monitored by repeated measurments of the **body fluid** concn. of at least one relevant **analyte** (I) during at least the pre-ovulation stage. Testing starts several (esp. at least 5) days after the start of menses but at least 2 (esp. 4) days before the earliest day on which actual ovulation occurred in previous cycles.

Partic. testing starts on 4, 5, 6, 7, 8, or 9 days before the earliest day of ovulation when the earliest previous ovulation day is, respectively, 8-10; 11-14; 15-18; 19-23; 24-28 and over 29.

Pref. (I) is oestradiol or its metabolites, e.g. oestrone-3-gluaronide, and 2 or more **analytes** can be monitored to provide comparative data (i.e. ratio of **analytes**). The earliest actual ovulation day is determined from measurements on at least 5 consecutive earlier cycles, or from a `roller' reference base (5-6 cycles) to account for any possible drift in ovulation date. The time of ovulation is taken as the day